

**STATE OF NEW MEXICO
COMMISSIONER OF PUBLIC LANDS**

**IN THE MATTER OF PROPOSED
AMENDMENT TO NMAC 19.2.100.23
(FINANCIAL ASSURANCE)**

May 28, 2026

**FIRST ADDENDUM TO MAY 26, 2026 COMMENT
OF INDEPENDENT PETROLEUM ASSOCIATION OF NEW MEXICO**

1 The Independent Petroleum Association of New Mexico (“IPANM”) submits this
2 First Addendum to its May 26, 2026 Comment in opposition to the proposed amendment
3 to 19.2.100.23 NMAC (“Proposed Rule”), to respond to information and rationale
4 presented during the Rulemaking Hearing on May 27, 2026. During the State Land
5 Office’s presentation, a copy of which comprised of thirty-four separate slides, attached
6 as **IPANM Exhibit 38**,¹ the Commissioner’s staff identified the “Core Objectives” of the
7 Proposed Rule changes, see Ex. 38 at 5, as follows:

- 8 - Adequate bonding to mitigate the risks associated with
- 9 actual and potential damage to state trust land
- 10 - Annual reporting that enables the agency to better
- 11 understand the potential liabilities and risks on each lease
- 12 and inform adjustments to bonding levels
- 13 - Manageable framework for agency and industry

14 In support of the SLO argument that the current rule is “inadequate”, *id.* at 6, efforts of the
15 newly formed Environmental Compliance Office were highlighted. The SLO claims that

¹ Emailed by SLO Special Projects Manager Elaine Heltman on May 27, 2026.

1 while the ECO is “supervising remediation and reclamation at sites across state trust
2 land...In every case the cost of work far exceeds the nominal value of the oil and gas
3 lease bonds.” *Id.* at 7. However, while the SLO has claimed “about three dozen” bonds,
4 the SLO reports only plugging **two (2) wells**. These 2 wells plugged by the SLO are in
5 comparison to the reported 860 wells that the Commissioner has “compelled” industry
6 members to plug at no cost to the New Mexico taxpayer, the State Trust Beneficiaries, or
7 the State Land Office. It remains unclear if those same 2 wells cited during the Hearing
8 are the Smith & Marrs, Inc. Sanmal Queen #5 (30-025-29569) and the High Plains
9 Production Corporation New Mexico State #001 (API 30-045-30291).² Because the
10 Sanmal Queen #5 and the High Plains wells were cited and discussed as part of the basis
11 and rationale in support of the Proposed Rule, further examination is warranted. In
12 addition to the two wells above, the SLO also presented two additional case studies, to
13 wit: Nordstrand Engineering, Inc, *id.* at 12, and G&G Oil and Gas, LLC, *id.* at 15.

14 **A. The Proposed Rule will not address, cure, or prevent SLO Case Studies.**

15 As drafted, the SLO Proposed Rule purports to increase the surface damage bond for oil
16 and gas leases provided for under NMSA 1978, § 19-10-26. The current regulation,
17 NMAC 19.2.100.23, establishes a single lease bond of \$10,000, a multi-lease bond go
18 \$20,000, and a Megabond of \$25,000. First, the mere existence of financial assurance
19 does not motivate or guarantee more prudent operation of wells and wellsites during the

² In response to IPANM’s public record requests, it does appear that the SLO has undertaken to plug an additional SWD well, the Jay Management Company, LLC OG SWD #002, see **Exhibit 43**. As a SWD well with additional bonding, for the same reasons the Sanmal Queen #005 is not addressed by the changes in the Proposed Rule, the Jay Management SWD well is likewise outside the bounds of increases in oil and gas lease surface damage bonds. See also Ex. 43 (“The money for this project was pulled from bonds seized from Jay Management Company and put into the contractual services budget.”); and *id.* (showing cost of \$100,000 with remaining balance of \$176,000).

lifetime of the well. Under current OCD Spill procedures, the operator is required to notify the surface owner, including the State Land Office.³ At the point at which financial assurance becomes relevant, the lessee in question tied to the FA is likely no longer responsive or actively operating the lease premises in question. Second, the examples relied upon by the SLO are not circumstances that will be directly affected by the Proposed Rule, discussed below.

1. Examination of the Sanmal Queen Unit #005

The Sanmal Queen Unit #005 was an injection well operating under a State Salt Water Disposal Lease, SW-142. Smith & Marrs, Inc. was the operator of the well, but not the lessee.⁴ The Commissioner requires increased Salt Water Disposal site reclamation bonding under NMAC 19.2.11.13. During the May 27, 2026 Hearing, SLO General Counsel rejected that operators could post surface damage bonds under the current statute and regulations, because the SLO Bond form does not accommodate and that the same was within the Commissioner's authority and discretion to reject additional bonding from operators. In this case study, the Sanmal Queen #005 was plugged by the operator and approved for release by the Oil Conservation Division in October 2009.⁵ The Sanmal

³ See NMAC 19.15.29.9(B.) ("If state, federal or tribal lands are involved, the responsible party must send a copy of the form C-141 to the appropriate land managing agency including the state land office, the BLM or tribal authority, as applicable.")

⁴ See New Mexico State Land Office NMSLO-Connect Lease Portal, <https://secure.slo.state.nm.us/Applications/SLOConnect/LandDetails/LandDetails> (last accessed May 28, 2026) (searched for NE4SE4 or Unit Letter "I" of Section 1, Township 17 South, Range 33 East, NMPM); see also SW-142 Lease Information, attached as **Exhibit 39**. But MMCP Leasing, LTD is a known affiliate of Smith & Marrs, Inc. Regardless, the SLO pursued both in litigation and obtained a \$7.5 million judgment. It is unknown what amount of that \$7.5 million has been recovered.

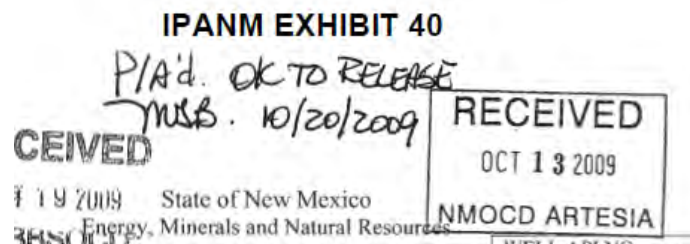
⁵ See OCD Well file for Sanmal Queen #005, retrieved from OCD Imaging Database, <https://ocdimage.emnrd.nm.gov/imaging/WellFileView.aspx?RefType=WF&RefID=30025295690000> (last accessed May 28, 2026) at page 63, attached as **Exhibit 40** :

Queen #005 does not appear on the OCD's Master Orphan Spreadsheet.⁶ Based on a brief review of the March 2017 Incident file, Incident no. nOY1708059305,⁷ a lease examination performed in early 2017 by the SLO led to later reclamation and litigation efforts. It does not appear from a review of the lease file or the incident file what efforts were taken by the SLO between the well closure in 2009 and the lease review in 2017. Additionally, the SLO presentation makes reference to an additional five (5) abandoned wells, but no additional Sanmal wells appear on OCD's Master Orphan Spreadsheet.

Where the Proposed Rules target oil and gas lessees, the plugging, remediation, and reclamation of salt water injection wells are not encompassed by the amendments proposed to NMAC 19.2.100.23.

2. Examination of the High Plains Case Study

The High Plains well, the New Mexico State #001, API 30-045-30291, was a shallow Mancos shale well in San Juan County, with a reported Total Vertical Depth of just 1,160 feet.⁸ Rather than the "one-man, one-well" operation indicated in the presentation, High Plains operated 9 wells in New Mexico and plugged eight of those wells. High Plains was



⁶ See IPANM Exhibit 34, OCD Exhibit 17 in Case No. 24683 (searched for API and Well name with zero results).

⁷ See IPANM Exhibit 41, retrieved from <https://ocdimage.emnrd.nm.gov/imaging/IncidentFileView.aspx?incident=nOY1708059305> (last accessed May 28, 2026)

⁸ Well File for High Plains NM State #001, attached as **Exhibit 42**.

1 a lessee of 15 state leases. The NM State #001 specifically was spud in 2000 and
2 operated until 2020. The High Plains well is not identified as orphaned or abandoned on
3 the OCD MOSS. See Ex. 34. Following roughly eighteen months of litigation against High
4 Plains, the SLO obtained a \$67,000 judgement, claimed the existing lease bond, and very
5 recently obtained approval from the OCD to plug the well. See Ex. 42 (April 15, 2026
6 Correspondence). The entirety of the process appears to have taken about six years to
7 obtain any meaningful activity for one well. As reflected by SLO General Counsel closing
8 remarks, this process is inefficient and the SLO is simply not staffed to manage this
9 approach. As a counterweight, because the SLO declined to pursue authority via OCD
10 notice of violation process, the High Plains well was not legally abandoned, is not eligible
11 for Reclamation Fund, and the almost \$30,000 OCD plugging bond for the High Plains
12 well specifically remains untouched. See Ex. 34.

14 3. *Nordstrand Engineering, Inc. Case Study*

15 The SLO presentation also highlighted the case study of Nordstrand Engineering, Inc. as
16 rationale in support of the Proposed Rule. There, five inactive wells were identified.
17 However, four of those five are currently plugged, and were plugged by industry, not the
18 SLO. See IPANM Ex. 34.⁹ Under the OCD's tracking mechanism, the 4 Nordstrand wells
19 are identified as "pluggable" and indicates that the SLO pursued other operators to do

⁹ API 30-005-20731 WESTERN HOLLY "32" STATE #001 Plugged, Not Released
API 30-005-20754 WESTERN HOLLY "32" STATE #002 Plugged, Not Released
API 30-005-20656 WESTERN RESERVES 32 STATE #002 Plugged, Not Released
API 30-005-20657 WESTERN RESERVES 32 STATE #003 Plugged, Not Released

1 so.¹⁰ Further, the SLO presentation failed to identify the OCD Financial Assurance
2 available for the above 4 wells: \$125,000 blanket plugging bonds, \$1,000,000 in
3 temporary abandonment additional financial assurance, and an additional \$50,000
4 blanket plugging bond. This bonding is in addition to the \$20,000 in surface damage
5 bonds claimed by the State Land Office. Moreover, the Nordstrand Case Study entirely
6 ignores that it is not the SLO that has taken on remediation and reclamation efforts but
7 other industry actors who have complied with SLO requests.

9 **B. Low Producing Wells are Not High Risk.**

10 Separately, the SLO presentation included a table in support of the theory that “Extremely
11 Marginal Wells Pose a High Risk to NMSLO.” See Ex. 38 at 20 (reporting royalty income
12 to the SLO at 1/8 and 1/5 rates at \$65/BBL and \$83/BBL for wells ranging from 100 to
13 1,000 barrels per year). This table appears to reflect as “years to break-even” at which
14 the SLO would collect royalty income equivalent to the 2025 LFC Report average
15 plugging cost of OCD. See IPANM Ex. 4. However, given that the SLO has plugged all
16 of 2 wells during either during its existence or in the past 6 years as part of its ECO and
17 Accountability and Enforcement program, and the SLO used its contractual services
18 budget to do, the table presents a disconnect to the existing custom and manner of doing
19 business. Additionally, the SLO has not examined or presented evidence that lower-
20 producing wells are *more* likely to be abandoned or orphaned, a key failure already
21 examined in the related Oil Conservation Commission hearing on bonding, Case No.

¹⁰ See *id.* (“SLO-Cimarex” and “SLO-Marathon”).

1 24683, which relies on two faulty assumptions: (1) bonding “incentivizes” operators to
2 plug wells,¹¹ and (2) a well must generate its own plugging costs.¹² The entire “low-
3 producing” risk theory is based on the 2025 LFC Report that a well produces, on average,
4 2 BBL/day in the year prior to being **plugged**, not that a well produces 2 BBL/day prior to
5 being *abandoned*. And it has been widely accepted and undisputed that the average
6 orphaning rate ranges between 1% and 5%. No party, in the SLO Rulemaking or in the
7 OCC rulemaking, has yet to undertake a study of the actual factors, common
8 characteristics, or performance markers associated with the OCD’s 1500 orphaned wells
9 on the Master Orphan Spreadsheet.¹³ .

10

¹¹ See Comment and Opinion of Rob Arscot, PhD, IPANM Exhibit 37, explaining economics of bonding as a mechanism in comparison to other drivers, like ability to operate and continue in business, for compliance.

¹² See IPANM Exhibit 16 at 2 & n.3, FOF 62-64, COL 11 (WELC Expert Thomas Alexander admitted that no operator manages its well portfolio such that a well is required to self-fund plugging costs).

¹³ Data one would think relevant to support a Proposed Rule with the stated primary concern of addressing legacy orphan well liability.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Ann Cox Tripp

Andrew J. Cloutier

Ann Cox Tripp

P.O. Box 10

Roswell, NM 88202-0010

575-622-6510

***Counsel for Independent Petroleum
Association of New Mexico***

From: [Heltman, Elaine G.](#)
To: [Stewart, Sunalei](#); [Ann Tripp](#); [Di Palma, Francesca](#); [Keefe, Joey D.](#); [Koluncich, Nicholas](#); [Padilla, Erica](#); [Biernoff, Ari](#); [Felicia Orth](#)
Cc: [Heltman, Elaine G.](#); [Davis, Timothy M.](#); [Felicia Orth](#); zpavlik@biologicaldiversity.org; [Andrea Felix](#); jimwinchester@ben@pbpa.info; [Missi Currier](#); [Dana Arnold](#); [Gabrielle Gerholt](#); [Jordan Kessler](#); [Patrick Padilla](#); [Marks, Allison](#); [Bloom, Greg B.](#); gevans@biologicaldiversity.org; fox@westernlaw.org; matthew.mcqueen@nmlegis.gov; larry.scott@nmlegis.gov; [Demis Foster](#); [Camilla Feibelman](#); mnanasi@newenergyeconomy.org; [Winscott, John](#); [Bisbey-Kuehn, Elizabeth A.](#); [Elliott, April L.](#); [Strang, Dana V.](#); [Di Palma, Francesca](#); [Keefe, Joey D.](#); [Romero, Selena](#); omundsdry@civiresources.com; [Garcia Richard, Stephanie](#); [Henzler, Chase](#); info@earthworks.org; rsobel@wildearthguardians.org; [Samantha Ruscavage-Barz](#); [Drew Cloutier](#); [Olga M. Serafimova](#); [Adam Rankin](#); [Chang, Albert, EMNRD](#); [Shelton, Benjamin, EMNRD](#); [Tremaine, Jesse, EMNRD](#)
Subject: NMSLO Proposed Bond Rulemaking - Hearing Presentation
Date: Wednesday, May 27, 2026 5:24:19 PM
Attachments: [image001.png](#)
[image002.png](#)
[image006.png](#)
[Bond Rule Presentation FINAL.pdf](#)

Good evening. As discussed at the conclusion of today's hearing, attached is a copy of the corrected NMSLO Proposed Bond Rulemaking Hearing presentation.



Elaine G. Heltman
Project Manager
Office of General Counsel
505.827-5715
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
eheltman@nmslo.gov
nmstatelands.org



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Hearing on Proposed Revision to Financial Assurance Provision of *Rule Relating to Oil and Gas Leases (19.2.100.23 NMAC)*

New Mexico State Land Office
May 27-28, 2026





Development and Publication of Proposed Rule

Pre-Publication Consultation

- ❖ Extensive stakeholder input and review took place between fall 2025 and spring 2026.
- ❖ Proposed rule amendment was finalized.

Publication of Notice of Hearing – pursuant to NMSLO Rules 19.2.16.9 (Comment Period) & .10 (Notice of Rulemaking) NMAC

- ❖ On April 6, 2026, a transmittal letter providing the Notice of Hearing was emailed to the Legislative Council for distribution to the appropriate interim and standing legislative committees.
- ❖ On April 7, 2026, the Notice of Bond Rule Amendment hearing was published in the New Mexico Register.
- ❖ On April 7, 2026, the Notice of Bond Rule Amendment hearing and proposed Rule Amendment were made available on the NMSLO website.
- ❖ On April 7, 2026, the Notice of Bond Rule Amendment hearing and proposed Rule Amendment were made available on the New Mexico Sunshine portal.
- ❖ On April 7, 2026, the Notice of Bond Rule Amendment hearing and proposed Rule Amendment were emailed to Interested Parties.
- ❖ On April 10, 2026, the Notice of Bond Rule Amendment hearing was published in the ABQ Journal.



Informal Public Engagement

PRE-PUBLICATION DISCUSSION DRAFT

- Released October 23, 2025; posted on NMSLO website
- Sent directly to stakeholders with expressed interest in bonding reform, including three oil and gas trade associations and environmental advocacy groups
- Held in-person (with Zoom option) stakeholder meetings
- Made various changes based on input received

STAKEHOLDER MEETINGS

- November 6 and 12, 2025 (Santa Fe)
- November 14, 2025 (Hobbs)
- November 17, 2025 (Farmington)





Informal Public Engagement

KEY CHANGES MADE IN RESPONSE TO INFORMAL COMMENTS

- **Bulk Bonds**: Capped bulk bonds for a single lessee at \$40 million (consistent with Colorado) and clarified that drawing on a financial assurance for one lease won't result in the loss of coverage for the other leases
- **Heightened Bonds**: Required heightened bonds to be listed on the agency's website; extended the period a lessee has to secure a heightened bond from 60 to 90 days; limited the potential deferment period for a lessee to avoid heightened bonding to 270 days
- **Annual Report**: Extended annual reporting timeframe; created a different attestation standard for a record title holder that is not the operator of wells; provided that leases subject to heightened bonding requirements may be subject to additional reporting (including asset retirement obligations); gave lessees time to fix reporting errors and indicated that corrected errors won't be used as an independent basis for lease cancelation



Purpose of Rule Changes

CORE OBJECTIVES

- Adequate bonding to mitigate the risks associated with actual and potential damage to state trust land
- Annual reporting that enables the agency to better understand the potential liabilities and risks on each lease and inform adjustments to bonding levels
- Manageable framework for agency and industry

STATUS QUO

- Insufficient bond minimums of \$10,000 (single lease bond), \$20,000 (blanket lease bond) and \$25,000 ("megabond")
- Billions of dollars in potential liability for taxpayers and state trust land beneficiaries
- Lack of actionable information to ensure bonding aligns with risks





NMSLO's Current, Inadequate Rule

19.2.100.23 SURETY TO PROTECT SURFACE PURCHASER AND LESSEE - WAIVERS:

A. Before any lessee shall commence development or operations, including any and all prospecting activities upon the lands, such lessee or operator shall execute and file with the commissioner a good and sufficient bond or other surety, in an amount to be fixed by the commissioner but not less than ten thousand dollars (\$10,000) in favor of the state of New Mexico for the benefit of the appropriate trust beneficiary and the state's contract purchasers, patentees and surface lessees, to secure payment to the extent allowed by law for such damage to their interests and tangible improvements upon such lands as may be suffered by reason of development, use and occupation of the lands by the oil and gas lessee.

B. A bond or other surety in the minimum amount of ten thousand dollars (\$10,000) for each lease shall be deemed sufficient unless and until the commissioner determines, or one or more surface lessees or purchasers show the commissioner, that such an amount is not adequate in a given case. Provided, however, that if a lessee holds more than one oil and gas lease, a blanket bond or other surety in the amount of twenty thousand dollars (\$20,000) will be acceptable unless and until the commissioner determines, or one or more surface lessees or purchasers show the commissioner, that such an amount is not adequate in a given case. Provided further, that if any purchaser, patentee or surface lessee shall file with the commissioner a waiver duly executed and acknowledged by the purchaser, patentee or surface lessee of the purchaser's, patentee's or surface lessee's right to require such bond or other surety pursuant to Section 19-10-26 NMSA 1978 the development, occupation and use of the lands by the oil and gas lessee may in the discretion of the commissioner be permitted without said surety.

C. With the approval of the commissioner, in lieu of the single and blanket bonds for oil and gas lessees, a twenty-five thousand dollar (\$25,000) bond or other surety may be used at the option of lessee for the use and benefit of the commissioner, to secure surface improvement damage and the performance of the lessee under one or more state leases or permits for minerals, oil and gas, coal or geothermal resources or as holder under one or more state rights of way or easements which the lessee has executed with the commissioner. The lessee will be obligated to perform and keep all terms, covenants, conditions and requirements of all state leases for minerals, oil and gas, coal or geothermal resources and of all state rights of way and easements executed with the commissioner, including the payment of royalties when due and compliance with all established mining plans and reclamation requirements.

[19.2.100.23 NMAC - Rp, 19.2.100.23 NMAC, 6/30/2016; A, 6/11/2019]



NMSLO's Environmental Compliance Office

- ECO was established in 2022. Its mission is to restore and maintain the health of state trust lands to support beneficiaries in perpetuity.
- ECO is supervising remediation and reclamation at sites across state trust land. Many of these sites are oil and gas wells, disposal wells, tank batteries, and other facilities – or resulting contamination – where NMSLO has claimed a lessee's bond after the lessee failed to respond to, or failed to honor, a compliance demand.
- In every case the cost of work far exceeds the nominal value of oil and gas lease bonds.



ECO's Mission and Program Overview

ECO's mission is to restore and maintain the health of state trust lands to support beneficiaries in perpetuity

- Created in 2022 to support the newly created Accountability & Enforcement Program
- Manage environmental issues on any type of lease
 - Mining, oil and gas, industrial manufacturing, construction industry, renewable energy, illegal dumping
 - Conduct compliance inspections and draft reports of findings
 - Review remediation and reclamation workplans
 - Draft lease stipulations and settlement agreement terms
 - Coordinate with all divisions and other regulatory agencies to ensure compliance with lease requirements and regulations
- Remediation and reclamation of oil and gas sites is ~ 90% of workload
- Currently overseeing 2300 active clean up projects on oil and gas sites
 - Projects with 250 oil and gas companies



ECO's Mission and Program Overview

ECO's mission is to restore and maintain the health of state trust lands to support beneficiaries in perpetuity

- Provide technical and regulatory expertise in support of the Office of General Counsel
- Participate in a multi-agency program to reclaim abandoned uranium mines throughout NM
 - First four mines being reclaimed are on STL
- ECO currently overseeing the remediation and reclamation of several sites that have no responsible party or as the result of a court order
- The cost to plug and remediate an oil and gas well site can range from \$150K to several hundred thousand dollars (and some very contaminated sites exceed \$1M)



Case Study: Smith & Marrs/Sanmal Queen Unit



- Smith & Marrs is a defunct one or two person company that operated low-producing wells on several adjoining state leases near Lovington that were held by a related entity called MMCP.
- This is a rare instance where the lessee was required to post a higher bond – in this case, \$60,000 – as the result of a settlement agreement with a prior NMSLO administration. In 2022, NMSLO claimed the bond and filed suit after the companies failed to plug their inactive wells or clean up the lease sites.



Case Study: Smith & Marrs/Sanmal Queen Unit

Cont.



- The State Land Office obtained a judgment against the companies for just under \$7.5M which was the estimated cost to plug the wells, clean up contamination, and properly reclaim the lease site. If final cleanup costs are in line with that estimate, the so-called heightened bond will cover less than 1% of those costs.
- The damages award was based on an assessment of the cost of plugging five abandoned wells, removing leaking oil tanks, trashed buildings, and other abandoned infrastructure, and most significantly, remediating serious contamination caused by oil and wastewater spills.
- Phase I – \$83,000 – Site Decommissioning, removing free liquids from surface
- Phase II – Site Assessment and Delineation and Cost Estimate to Remediate and Reclaim
- Phase III – Remediate and Reclaim site



Case Study: Nordstrand Engineering, Inc.

- Nordstrand had two leases; both have since expired. NMSLO claimed the company's \$20,000 bond after it failed to respond meaningfully to demands to plug five inactive wells and conduct associated surface cleanup.
- NMSLO entered into a settlement agreement with another oil and gas company under which that company performed an initial phase of work at the site. Just the plugging of the inactive wells and site delineation cost more than \$1.3 million. The company had initially estimated just \$44k to plug each well; actual plugging costs were significantly higher.
- The remediation work at just one of the sites was estimated in a 2024 workplan to exceed \$225,000. The bond accounted for less than 2% of actual and estimated costs – not including surface remediation/reclamation at four more well sites.
- NMSLO had to sue Nordstrand a second time for its failure to responsibly close out its other state lease. The company filed for bankruptcy protection a day before trial but the bankruptcy case was recently dismissed. Nordstrand continues to operate marginally in Texas.





Case Study: High Plains Petroleum Corp.



- High Plains Petroleum was a one-man company based out of the owner's home. At the time of suit, it operated just one well in the entire United States – located in a fragile area near the Hogback Area of Critical Environmental Concern in San Juan County.
- High Plains had a \$10,000 bond on file with NMSLO, which was all that was required at the time it obtained its lease in the early 2000's. That is still all that is presumptively required today.
- NMSLO initiated litigation in 2021 and claimed High Plains' bond in 2022. After NMSLO filed for summary judgment against High Plains, the company sought bankruptcy protection and by all indications had virtually no assets.



Case Study: High Plains Petroleum Corp.

Cont.



- NMSLO is conducting work at High Plains site now, in spring/summer 2026.
- Although High Plains' owner ignored his legal responsibilities, NMSLO is fortunate that this is a relatively clean site, with limited soil contamination.
- The total cost to plug, remediate, and reclaim could be as low as \$150,000 or higher than \$300,000. The bond will end up covering 7% of total cleanup – at most.



Case Study: G&G Oil and Gas, LLC



- G&G is a one-person company from Hobbs – a side business for a Hobbs man who runs a pawnshop and a sport vehicle dealership. All G&G wells were inactive by 2018 and its leases had expired.
- NMSLO claimed the \$20,000 bond in the fall of 2023. After G&G still failed to take remedial action, NMSLO sued G&G later in 2023 and settled with G&G month for a payment of \$580,000.
- Plugging and remediation/reclamation on one of the leases, with two wells, will likely cost at least \$600,000. Just the first phase of the work, which will consist of plugging, a site delineation, and removal of equipment and junk, is expected to be over \$330,000.
- The bond will cover around 3% of the work and that doesn't include G&G's inactive wells on a second lease.



Proposed Rule: Base Bonding Levels and Bulk Bonds

MINIMUM BONDING

- Increases minimum bonding requirement to \$150,000 per lease (\$100,000 for mineral only)

BULK BONDS

- Allows lessees to bundle financial assurance for multiple leases at a discounted rate

Between 10 and 19 leases: \$130,000 per lease

Between 20 and 49 leases: \$110,000 per lease

Between 50 or more leases: \$100,000 per lease

- Total amount required of a single lessee shall not exceed \$40 million, excluding any lease subject to heightened bonding





Proposed Rule: Heightened Bonding

HEIGHTENED BOND FACTORS

- Inactive wells (with some exceptions, e.g. wells in limited periods of OCD Temporary Abandonment, NMSLO–approved shut-in)
- Extremely low producing wells (250 bbl/oil or gas equivalent in past year)
- Unremediated spills/releases
- Claims against the lessee's financial assurance or lawsuits relating to lease operations





Proposed Rule: Heightened Bonding

ADDITIONAL HEIGHTENED BOND PROVISIONS

- Other compliance-related factors may be considered
- NMSLO provides lessees with notice of requirement to post heightened FA
- Lessees may defer heightened FA for up to 270 days (almost 9 months) if they are diligently resolving issues triggering heightened FA requirement
- NMSLO may require additional reporting for leases covered by heightened bonds
- Leases subject to heightened bond requirement will be made public





Extremely Marginal Wells Pose a High Risk to NMSLO

	12.5% RR @ \$65 Years to break-even (to nearest year)	20% RR @ \$65 Years to break-even (to nearest year)	12.5% RR @ \$83 Years to break-even (to nearest year)	20% RR @ \$83 Years to break-even (to nearest year)
100 bbl/year	\$812.50 (201 years)	\$1,300.00 (125 years)	\$1,037.50 (157 years)	\$1,660.00 (98 years)
250 bbl/year	\$2,031.25 (80 years)	\$3,250.00 (50 years)	\$2,593.75 (63 years)	\$4,150.00 (39 years)
300 bbl/year	\$2,437.50 (67 years)	\$3,900.00 (42 years)	\$3,112.50 (52 years)	\$4,980.00 (33 years)
500 bbl/year	\$4,062.50 (40 years)	\$6,500.00 (25 years)	\$5,187.50 (31 years)	\$8,300.00 (20 years)
750 bbl/year	\$6,093.75 (27 years)	\$9,750.00 (17 years)	\$7,781.25 (21 years)	\$12,450.00 (13 years)
1,000 bbl/year	\$8,125.00 (20 years)	\$13,000.00 (13 years)	\$10,375.00 (16 years)	\$16,600.00 (10 years)



Proposed Rule: Annual Reporting

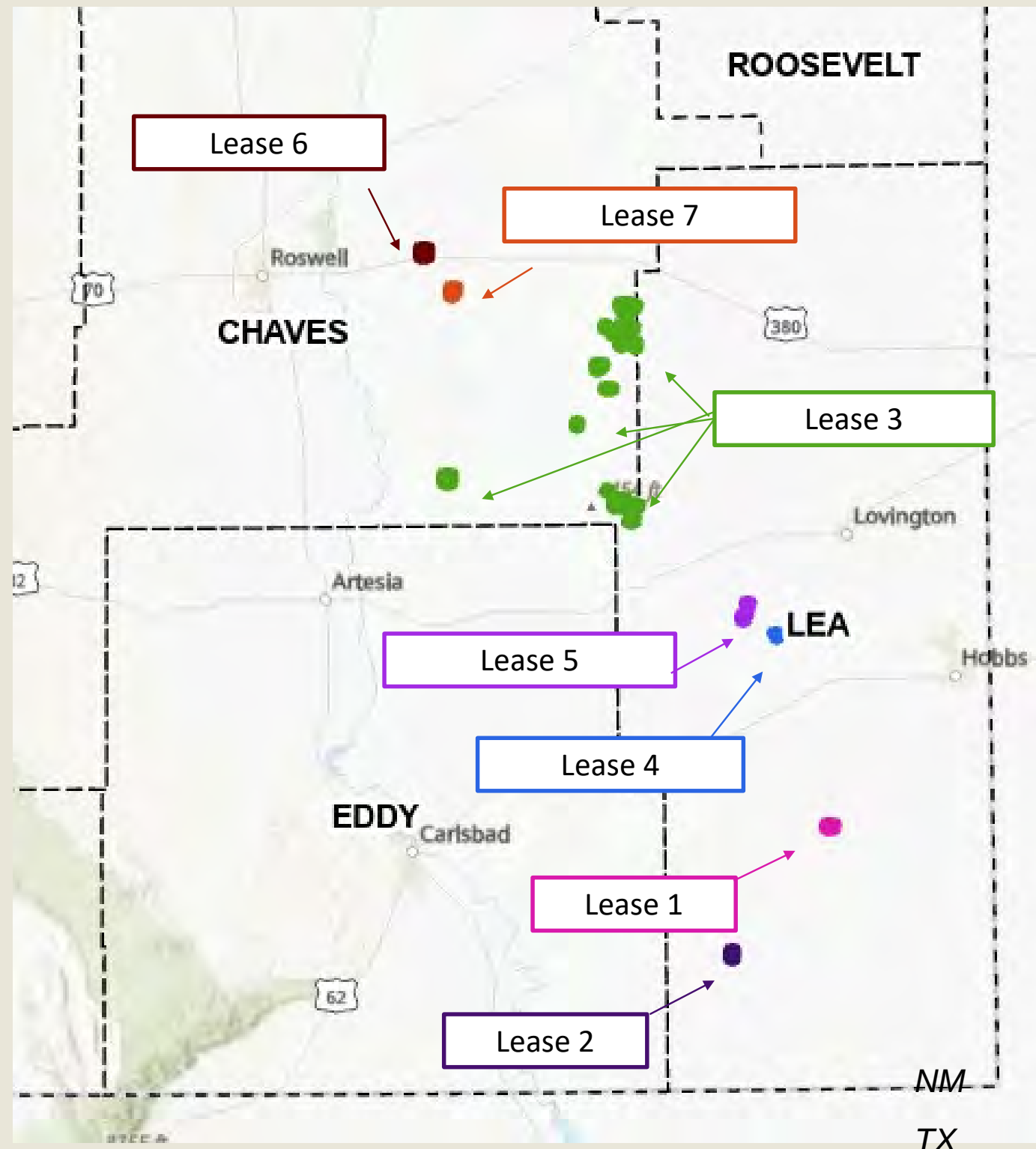
REPORTING REQUIREMENTS

- Annual report required for each lease – due July 1 for the preceding year
- Reporting components include inventory of wells, well status, inventory of fixed oil and gas-related infrastructure, spills/releases, and regulatory actions or lawsuits involving lease operations
- Lessees are required to make reasonable inquiry into lease conditions
- Lessees do not need to submit a full report for leases with no status changes
- Honest reporting mistakes do not result in lease cancellation
- Reporting details inform future bonding adjustments





Example Lease Reviews

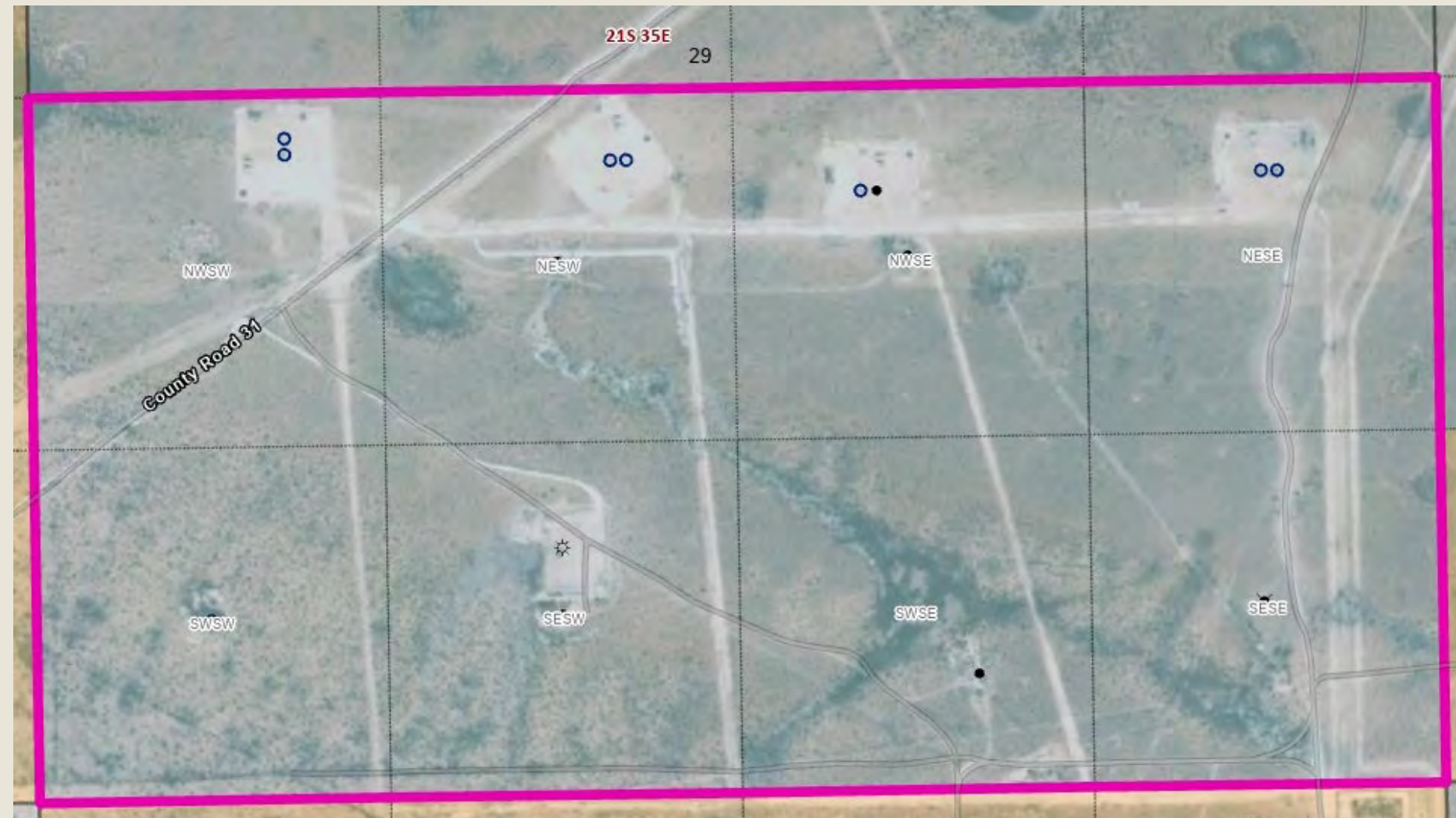


Lease	Lessee	No. of Wells	No. Operators	Acres
Lease 1	Lessee A	14	3	320
Lease 2	Lessee A	10	1	320
Lease 3	Lessee A	2	2	~4483
Lease 4	Lessee B	2	1	160
Lease 5	Lessee B	6	2	280
Lease 6	Lessee C	16	2	640
Lease 7	Lessee C	12	1	320



Lessee A – Major Company

- Full Estate
- 320 acres: 29-21S-35E
- Fourteen wells and one tank battery.
- Three operators
- Five wells from one operator have produced, cumulatively, only approximately 170 BBL and 1160 MCF since 2018. Some well pads appear to be overgrown which could cause a fire hazard.
- Tank Battery: *See following slide.*





Lease 1 – Tank Battery

- 32.442833, -103.386025
- Current Status: “Closure Not Accepted”.
- Major open spill of 40 BBL of crude oil from 2015.
- Current Status: “Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator”.
- Tank battery appears to have possible staining, unused equipment, and is overgrown.





Lease 2

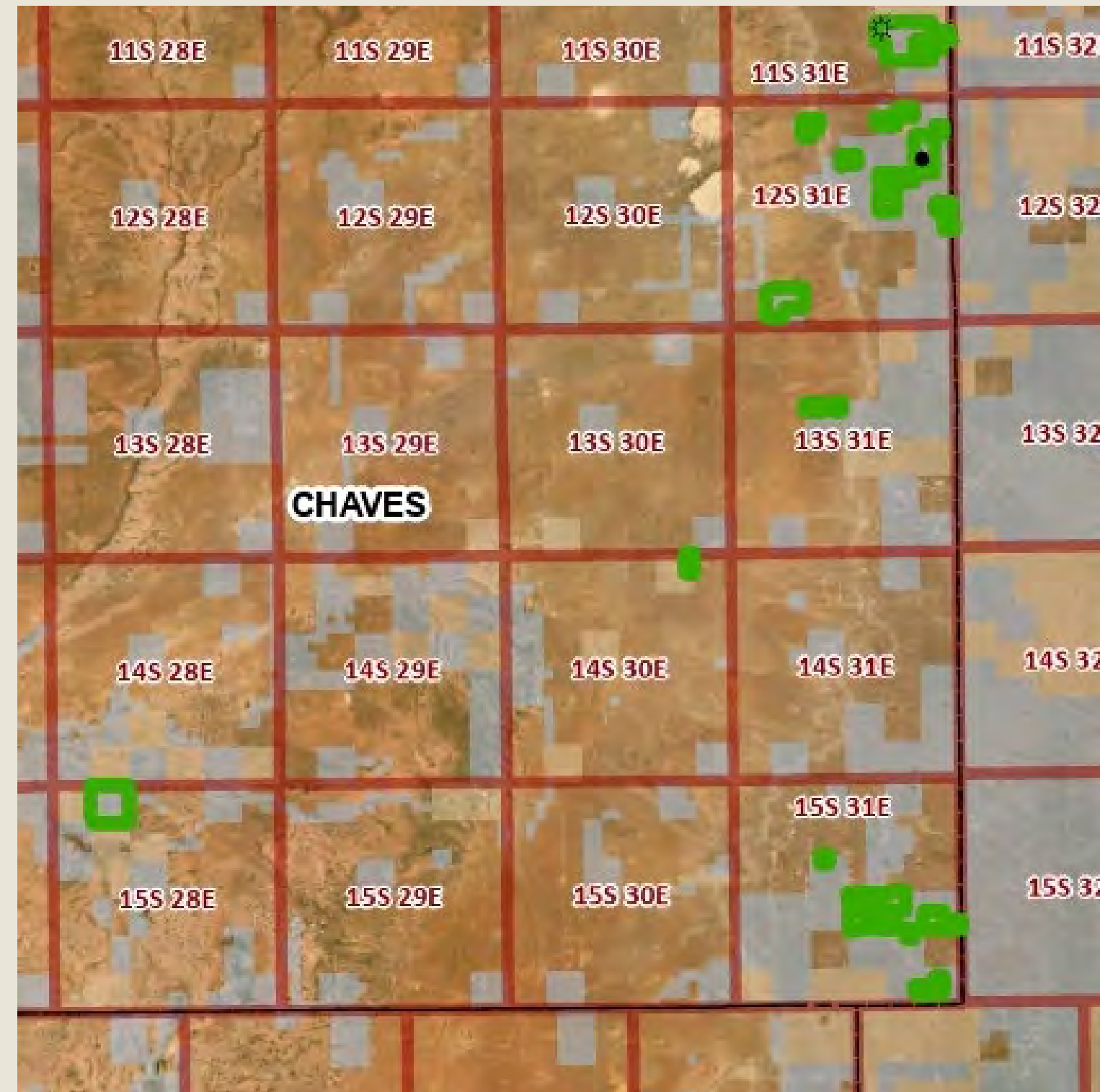
- Full Estate
- 320 acres: 8-24S-33E
- Ten wells and three tank batteries.
- One Operator
- One open spill at a tank battery for 15 BBL of crude oil and 46 BBL of produced water from 2022. Current status is "Remediation Closure Report Approved, Pending submission of Reclamation Report from the operator".





Lease 3

- Full and Mineral Only Estate
- ~4483 acres covering multiple Section-Townships-Ranges
- Two wells.
- Two Operators.
- One well: Open compliance for staining around wellhead.





Lessee B – Mid-Sized Company

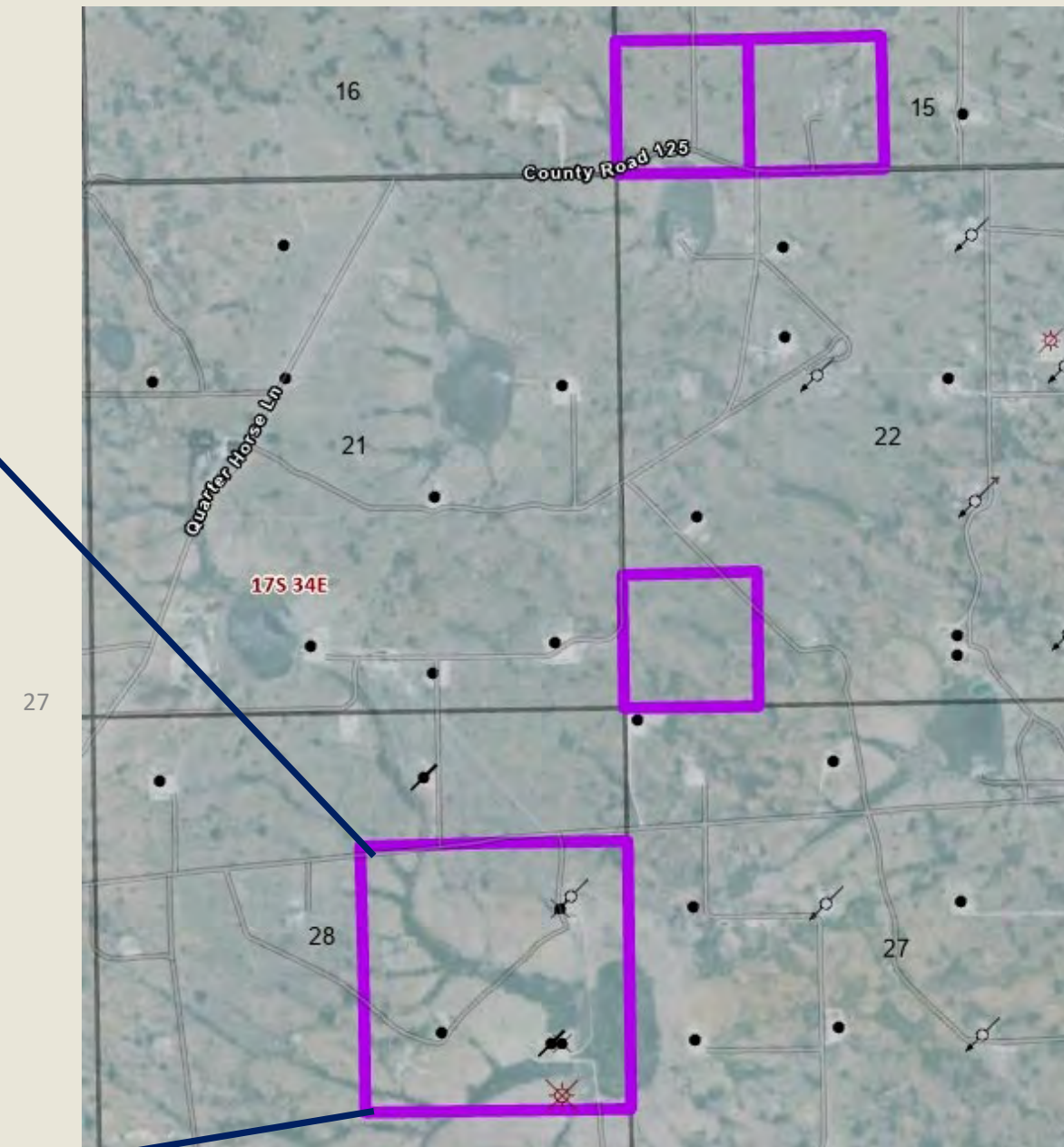
- Full Estate
- 160 acres: 6-18S-36E
- Two wells.
- One operator.
- One well: Approved TA until 6/1/2026.
No production since 6/2016.
- Plugged wells could possibly have more reclamation.





Lease 4

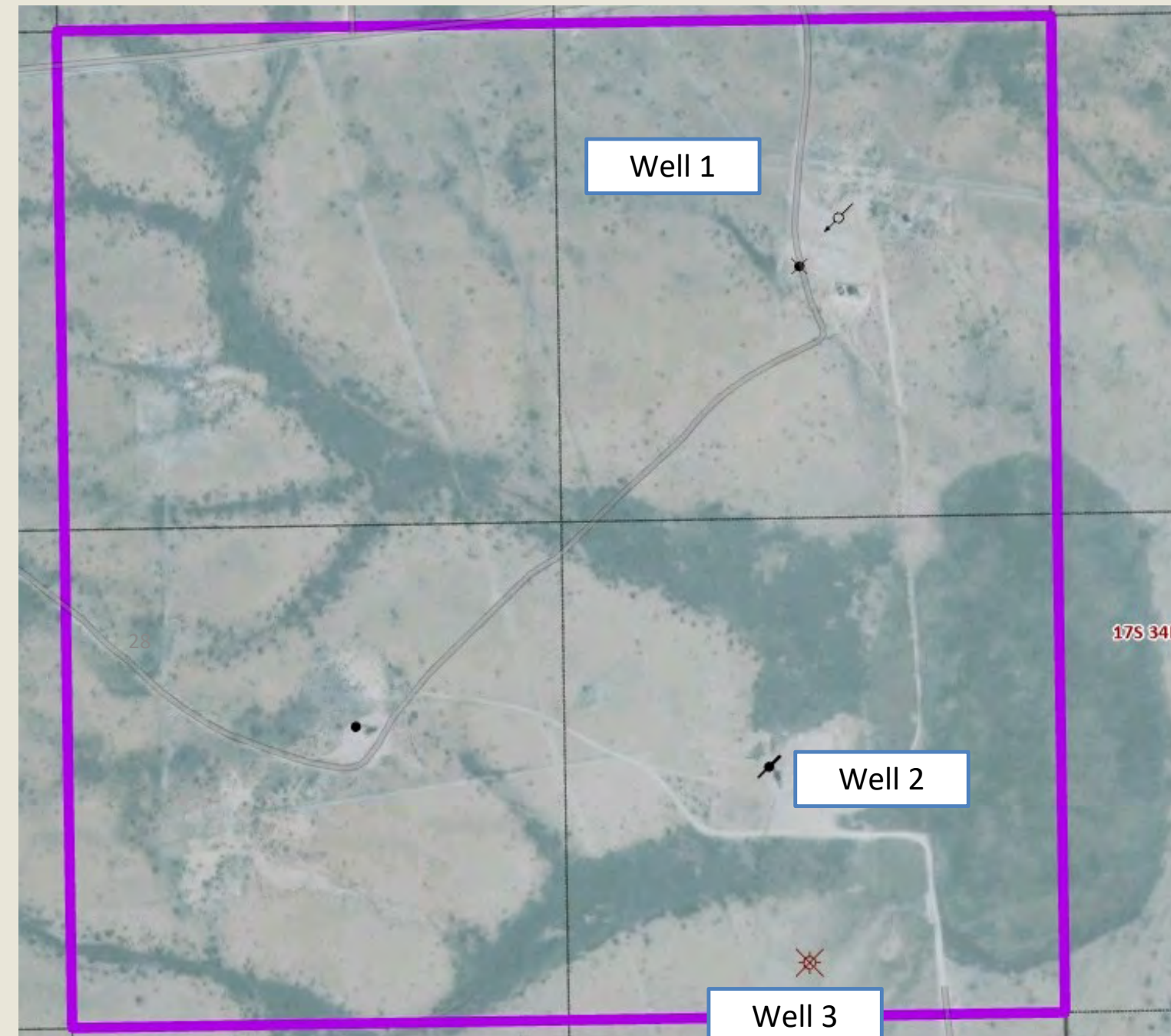
- Full Estate
- 280 acres: S2SW4 of 15, SW4SW4 of 22, S2NE4 & N2SE4 of 28 in 17S-34E
- Two operators.
- Six wells on Section 28.





Lease 5

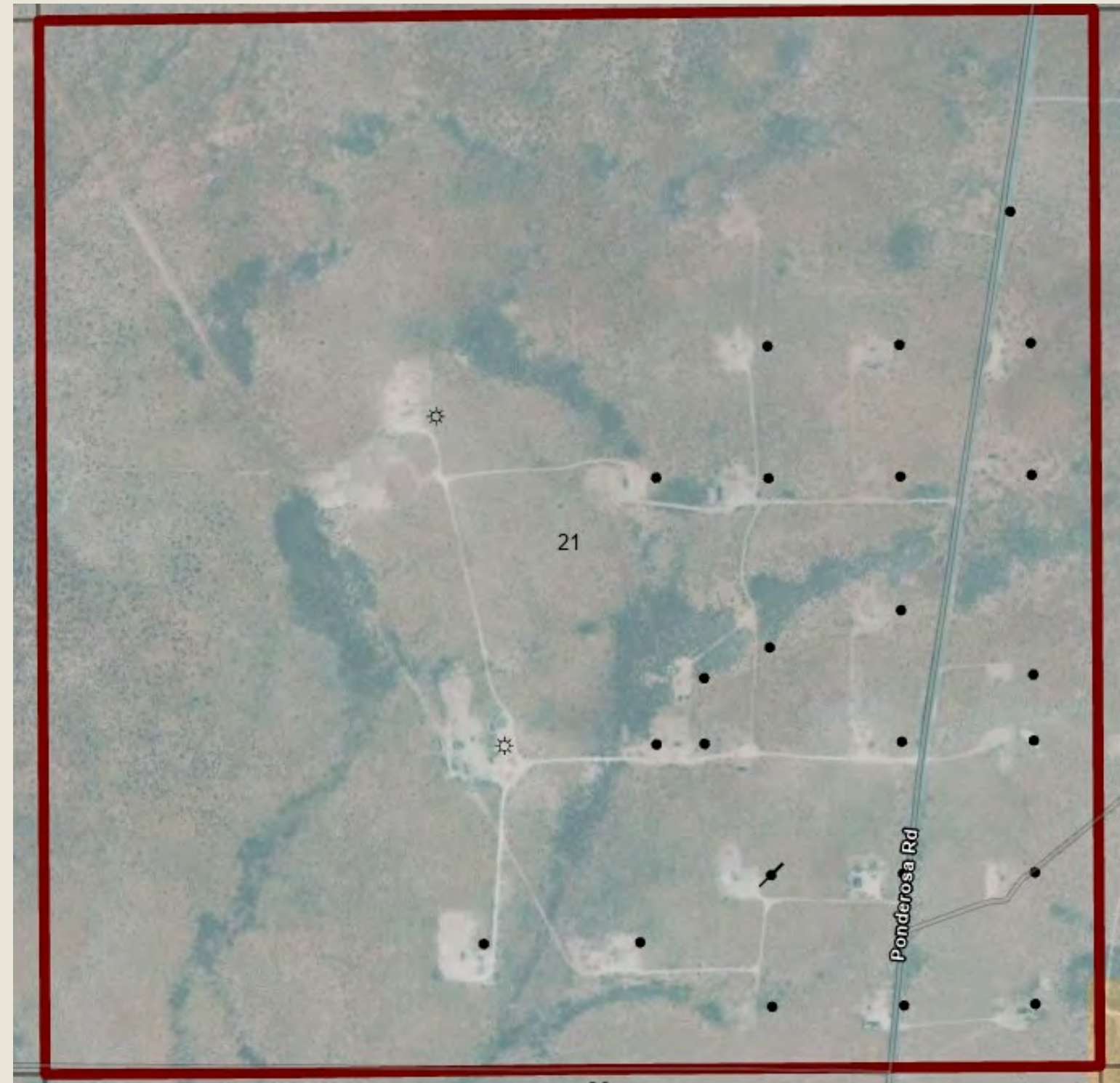
- Well 1: Plugged 12/18/2024 but not released. See next slide for more detail.
- Well 2: Plugged, Not Released. Plugged 12/23/2024.
- Well 3: Plugged, Not Released. Plugged 12/21/2023.
- In violation of 19.15.25.10 (D) NMAC





Lessee C – Small Company

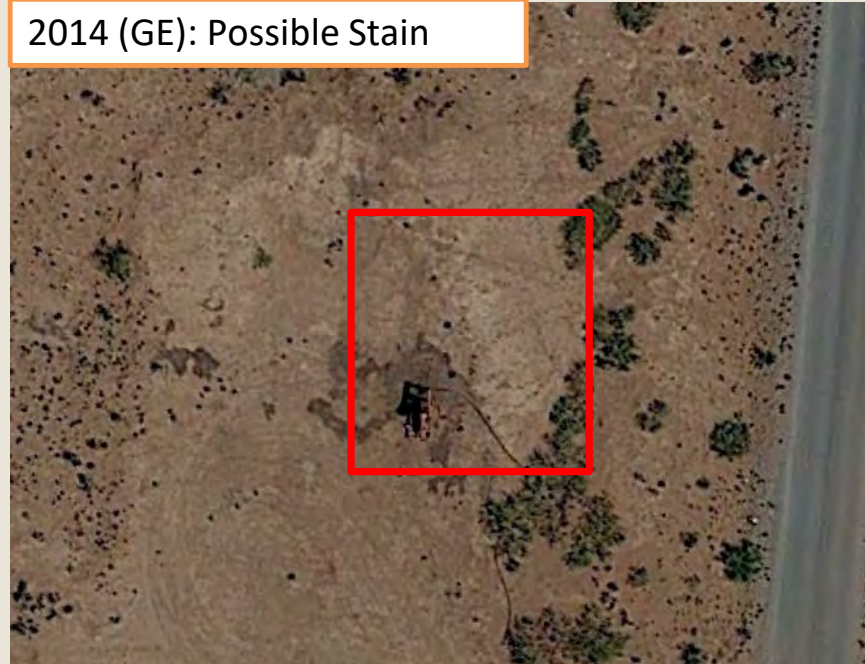
- Full Estate
- 640 acres: 21-10S-27E
- Sixteen wells and one tank battery.
- Two operators.
- Previously idle well since 2016 but has produced, cumulatively, 335 BBL since 2024.
- Two open spills with the OCD.
- A couple of wells have open compliance for rusted tanks, tank battery liner tears, missing secondary containment, equipment left on site, etc.



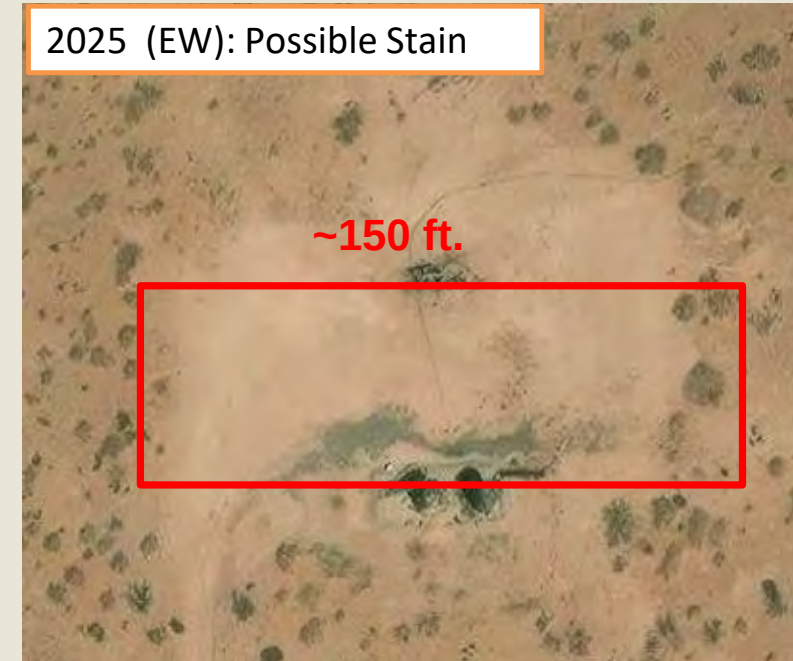


Lease 6 – Spills

2014 (GE): Possible Stain



2025 (EW): Possible Stain



2025 (EW): Possible Stain



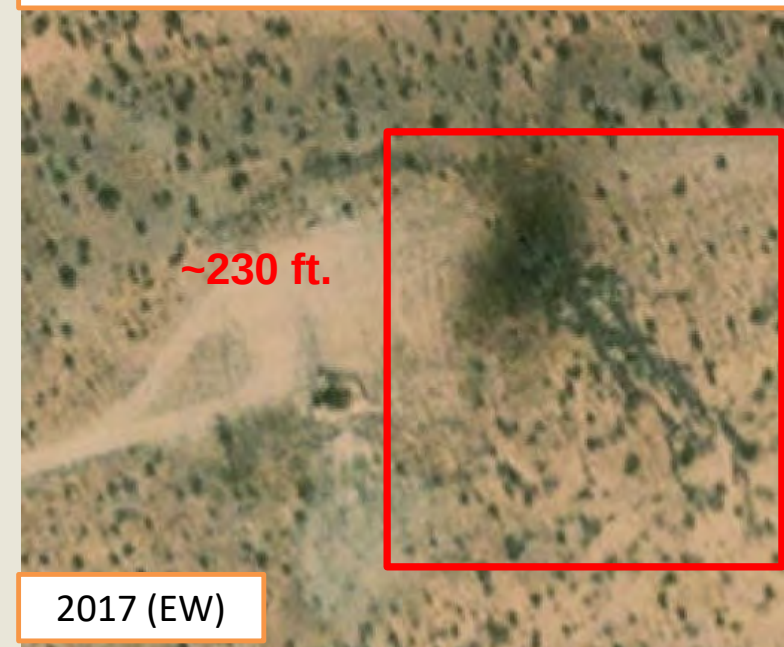
2023 (GE): Possible Stain



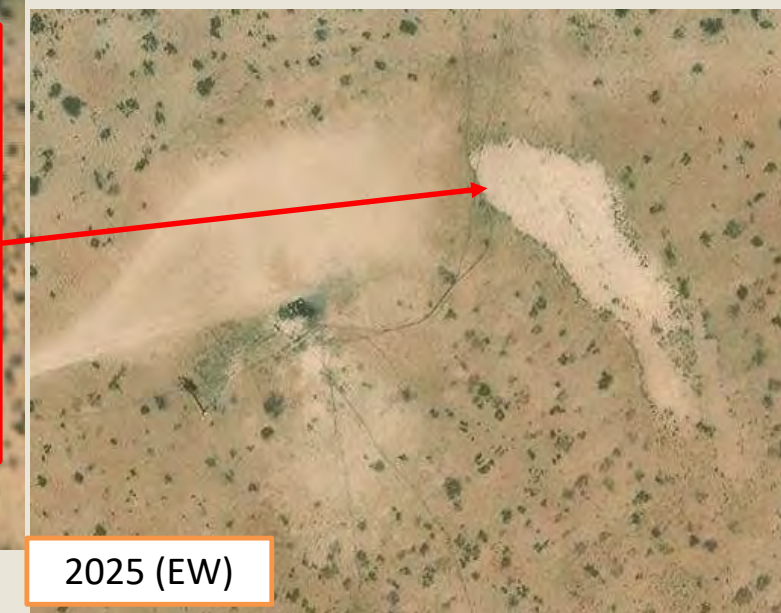
Appears to be a flowline spill from satellite imagery. Could be tied to open spill from 2017 that has a current status of "Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator".

~230 ft.

2017 (EW)



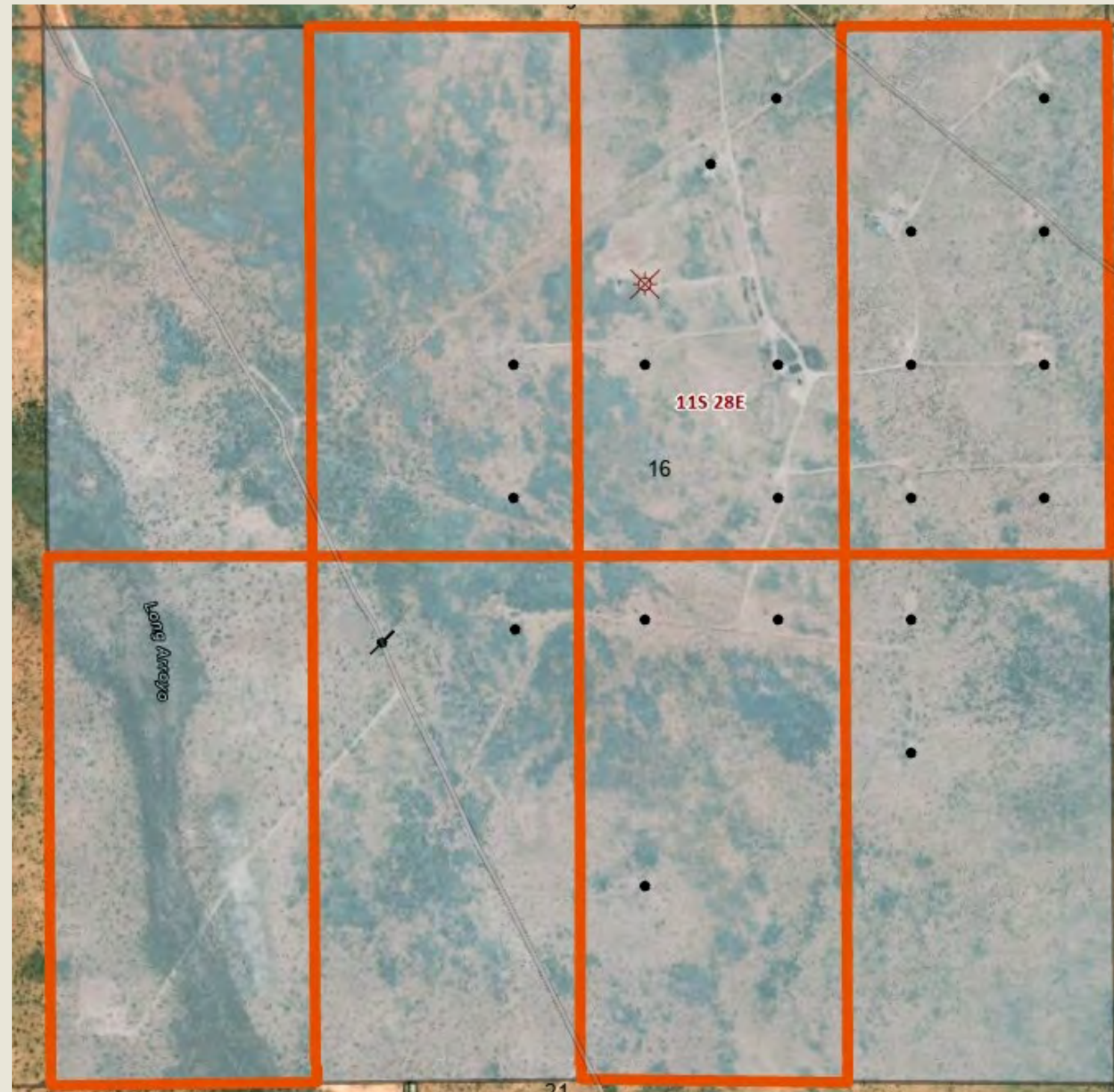
2025 (EW)





Lease 7

- Full Estate
- 320 acres in 16-11S-28E
- Twelve Wells
- One operator.
- All twelve wells have been producing less than 200 BBL per year since 2017 and production has been declining.
- Approximately half of these wells appear to have possible staining around the wellhead.





Proposed Rule: Other Provisions

PERIODIC ADJUSTMENT

- Inflationary adjustment every five years
- Review of bonding adequacy based on compliance factors at least every five years
- Allows for downward adjustments if NMSLO obtains access to OCD plugging bonds in the future

FORMS OF FINANCIAL ASSURANCE

- Surety bonds
- Letters of credit subject to certain requirements
- Cash deposit
- Allows for possibility of alternative future forms of FA





Proposed Rule: Other Provisions

OTHER PROVISIONS

- Waivers and riders
- Describes process for claims against FA and release of FA

IMPLEMENTATION SCHEDULE

- Heightened risk – within 90 days
- Large lessees (50 or more leases) – December 1, 2026
- All other leases – May 1, 2027
- Annual reporting requirement – July 1, 2027





Questions and Public Comment

Questions?
505-827-5760
info@nmslo.gov
www.nmstatelands.org

Thank You!



IPANM EXHIBIT 39

[Back](#)[Home](#)

Lease Information Details

[General Land Status
Maps](#)[State Trust Land
Details](#)[Lease Search](#)[Billing Information](#)[Lease Assignment](#)[Assignment History](#)[Units](#)[Unit Boundaries](#)[Operator Listing](#)[Communitization
Info](#)[List Assignment](#)[External Links](#)[New Mexico State
Land Office Website](#)[ENMRD Oil
Conservation
Division](#)[ONGARD Reporting](#)[Agricultural Lease
Payment Portal](#)[Support](#)[User Manual](#)

Lease Number: SW-142-1

Lease Information

Company Name	Company ID	Assigned From	Total Acres	Prod Stat	
MMCP LEASING, LTD	255756	12/31/9999 12:00:00 AM	2.50	N/A	

Lease Term

Lease Term	Issuing Date	Expiration Date	Termination Date	Termination Reason	Current Term
N/A	8/27/2008 12:00:00 AM	8/26/2016 12:00:00 AM	12/31/9999 12:00:00 AM	N/A	N/A

Rent Billing Information

Bill To	Minimum Annual Rent	Last Rent Bill Date	Next Rent Bill Date	Rent Payment Date
255756	Unavailable	10/1/2024 12:00:00 AM	8/27/2016 12:00:00 AM	Unavailable

Land Details[Export csv file](#)

10 entries per page

Search:

Township Number	Range Number	Section Number	Unit Number	Lot Number	Land Details
17S	33E	1	I		Land Details

Showing 1 to 1 of 1 entry

« ‹ 1 › »

If you have any questions about the data or this site please contact us at: [Applications Support](#)[Download User Manual](#)

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Lease Information Details

[General Land Status
Maps](#)[State Trust Land
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Info](#)[List Assignment](#)[External Links](#)[New Mexico State
Land Office Website](#)[ENMRD Oil
Conservation
Division](#)[ONGARD Reporting](#)[Agricultural Lease
Payment Portal](#)[Support](#)[User Manual](#)

Lease Number: SW-142-0

Lease Information

Company Name	Company ID	Assigned From	Total Acres	Prod Stat
EOG Y RESOURCES, INC.	25575	12/22/2008 12:00:00 AM	0.00	N/A

Lease Term

Lease Term	Issuing Date	Expiration Date	Termination Date	Termination Reason	Current Term
N/A	8/27/1990 12:00:00 AM	8/26/2008 12:00:00 AM	12/22/2008 12:00:00 AM	All Assigned	N/A

Rent Billing Information

Bill To	Minimum Annual Rent	Last Rent Bill Date	Next Rent Bill Date	Rent Payment Date
25575	Unavailable	10/25/2007 12:00:00 AM	12/31/9999 12:00:00 AM	Unavailable

Land Details[Export csv file](#)

10 entries per page

Search:

Township Number	Range Number	Section Number	Unit Number	Lot Number	Land Details
No data available in table					

Showing 0 to 0 of 0 entries

« 1 1 »

If you have any questions about the data or this site please contact us at: [Applications Support](#)[Download User Manual](#)

9/10/93 reclass to Inject Well Sanma Queen Ut WEP
 4-22-93 Inj. press. incr. to 950 Psi
 Lwd 402 Queen 3767-3774' w/ pkr 3708 Inj. press. 2753 Psi
 NFD I703 9/1/86

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator YATES PETROLEUM CORPORATION		Well API No. 30-025-29569
Address 105 South 4th St., Artesia, NM 88210		
Reason(s) for Filing (Check proper box) New Well ☐ Recompletion ☐ Change in Operator ☐		☒ Other (Please explain) CHANGE WELL NAME EFFECTIVE NOVEMBER 1, 1993, AS FOLLOWS: FROM: Hoover ADR State #1 TO: Sanmal Queen Unit #5
Change in Transporter of: Oil ☐ Dry Gas ☐ Casinghead Gas ☐ Condensate ☐		
If change of operator give name and address of previous operator _____		

II. DESCRIPTION OF WELL AND LEASE

Lease Name INJECTION WELL Sanmal Queen Unit	Well No. 5	Pool Name, Including Formation Sanmal Queen	Kind of Lease ☒ State ☐ Federal or Fee	Lease No. LG-3345
Location Unit Letter <u>I</u> : <u>1650</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>East</u> Line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐ <u>Injection Well</u>	Address (Give address to which approved copy of this form is to be sent)					
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)					
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Rusty Klein

Signature
Rusty Klein
Printed Name
November 19, 1993
Date
Production Clerk
(505) 748-1471
Telephone No.

OIL CONSERVATION DIVISION
NOV 24 1993

Date Approved _____

By ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Title _____

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

to Appropriate
District Office

Energy, Minerals and Natural Resources Department

Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-29569
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. LG-3345
7. Lease Name or Unit Agreement Name Hoover ADR State
8. Well No. 1
9. Pool name or Wildcat Sanmal Queen

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER SWD Well	
2. Name of Operator YATES PETROLEUM CORPORATION	
3. Address of Operator 105 South 4th St., Artesia, NM 88210	
4. Well Location Unit Letter <u>I</u> : <u>1650</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>East</u> Line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4139' GR	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐		CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: Packer Leakage Test ☒	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Attached please find the chart for the Packer Leakage Test that was conducted on May 20, 1993.

SWD-402

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Rusty Klein TITLE Production Clerk DATE July 27, 1993

TYPE OR PRINT NAME Rusty Klein TELEPHONE NO. 505/748-1471

(This space for State Use)

Orig. Signed by
Paul Kautz
Geologist

APPROVED BY _____ TITLE _____ DATE AUG 02 1993

CONDITIONS OF APPROVAL, IF ANY:

WIN 280027

WESTMETER MODEL "C"

PORT WORTH, TEXAS

WESTERN CO.

PRINTED IN U.S.A.

12:30

Press. Test

PRESSURE X 1000 PSI
 10 9 8 7 6 5 4 3 2 1 0
 18 17 16 15 14 13 12 11 10 9 8
 DENSITY, PPG

PRESSURE X 1000 PSI
 10 9 8 7 6 5 4 3 2 1 0
 18 17 16 15 14 13 12 11 10 9 8
 DENSITY, PPG

PRESSURE X 1000 PSI
 10 9 8 7 6 5 4 3 2 1 0
 18 17 16 15 14 13 12 11 10 9 8
 DENSITY, PPG

FLOW RATE bbls / min.
 10 9 8 7 6 5 4 3 2 1 0
 20 18 16 14 12 10 8 6 4 2 0

FLOW RATE bbls / min.
 10 9 8 7 6 5 4 3 2 1 0
 20 18 16 14 12 10 8 6 4 2 0

FLOW RATE bbls / min.
 10 9 8 7 6 5 4 3 2 1 0
 20 18 16 14 12 10 8 6 4 2 0

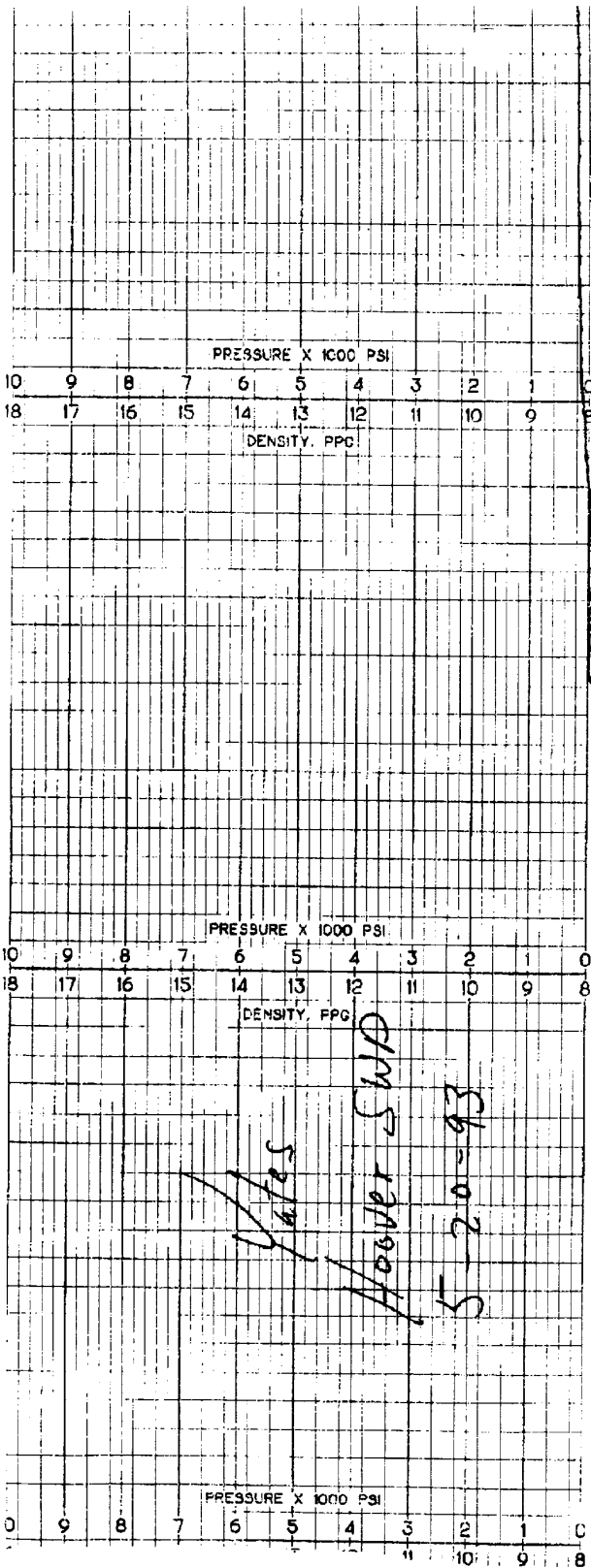
283-97

WESTMETER MODEL 10

FLUID METER TEARS

WESTERN CO.

MADE IN U.S.A.



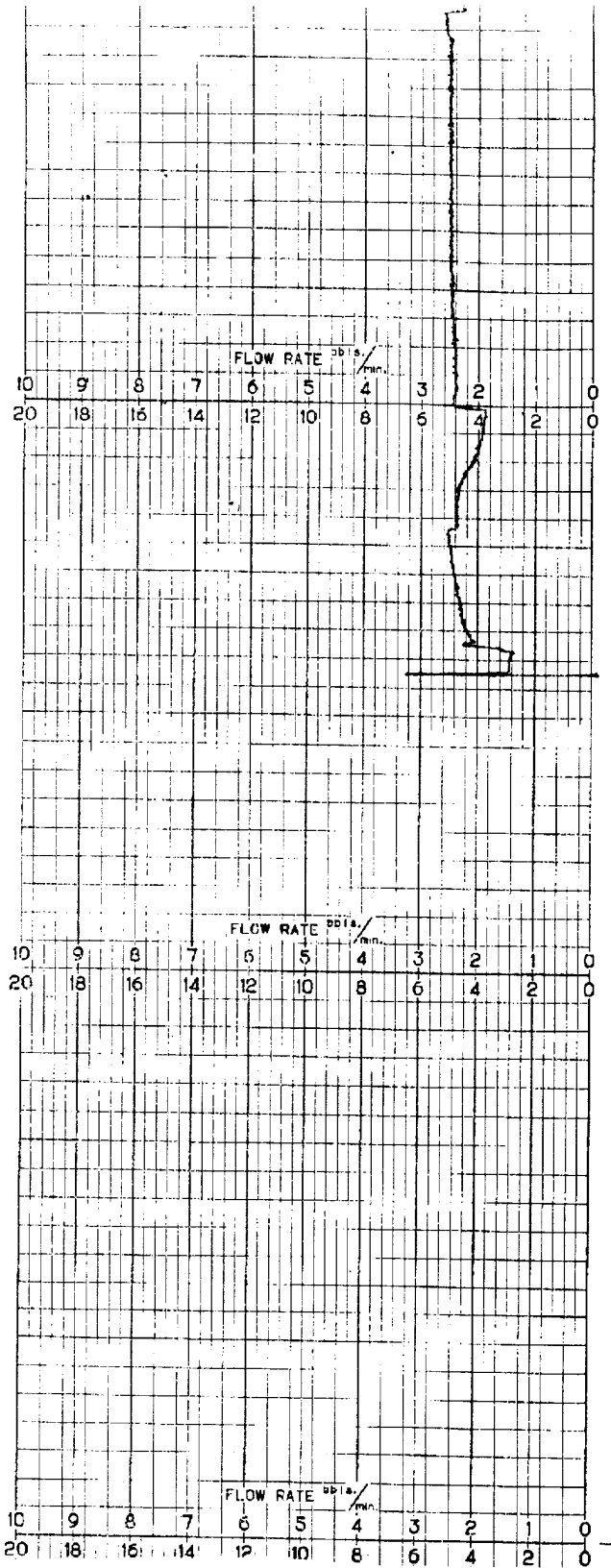
WV 280097

WESTON METER MODEL 100

OKI WORTH, TEXAS

WESTERN CO.

PRINTED IN U.S.A.



TRETOLITE®

Chemicals and Services

PETROLITE

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620346 • FAX: 713 589-4737Reply to: P.O. Box FF
Artesia, New Mexico 88210
(505) 746-3588 Phone
(505) 746-3580 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM Date : 10/29/92
 Address : ARTESIA, NEW MEXICO Date Sampled : 10/22/92
 Lease : HOOVER AOR State #1-I Analysis No. : 934
 Well : SWD
 Sample Pt. : WELLHEAD 1-17-33

ANALYSIS		mg/L	* meq/L
-----		-----	-----
1.	pH	6.0	
2.	H ₂ S	3 PPM	
3.	Specific Gravity	1.195	
4.	Total Dissolved Solids	333306.1	
5.	Suspended Solids	NR	
6.	Dissolved Oxygen	NR	
7.	Dissolved CO ₂	260 PPM	
8.	Oil In Water	NR	
9.	Phenolphthalein Alkalinity (CaCO ₃)		
10.	Methyl Orange Alkalinity (CaCO ₃)	150.0	
11.	Bicarbonate HCO ₃	183.0	HCO ₃ 3.0
12.	Chloride Cl	201535.0	Cl 5685.0
13.	Sulfate SO ₄	1650.0	SO ₄ 34.4
14.	Calcium Ca	2725.4	Ca 136.0
15.	Magnesium Mg	1400.3	Mg 115.2
16.	Sodium (calculated) Na	125783.1	Na 5471.2
17.	Iron Fe	29.2	
18.	Barium Ba	NR	
19.	Strontium Sr	NR	
20.	Total Hardness (CaCO ₃)	12571.3	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
136 *Ca <----- *HCO ₃	Ca(HCO ₃) ₂	81.0 3.0	243
115 /-----> *SO ₄	CaSO ₄	68.1 34.4	2339
5471 *Na <-----> *Cl	CaCl ₂	55.5 98.6	5474
	Mg(HCO ₃) ₂	73.2	
	MgSO ₄	60.2	
	MgCl ₂	47.6 115.2	5484
Saturation Values Dist. Water 20 C	NaHCO ₃	84.0	
CaCO ₃ 13 mg/L	Na ₂ SO ₄	71.0	
CaSO ₄ * 2H ₂ O 2090 mg/L	NaCl	58.4 5471.2	319738
BaSO ₄ 2.4 mg/L			

REMARKS:

----- L. MALLET / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
ROZANNE JOHNSON

PETROLITE

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 10/29/92
Address	: ARTESIA, NEW MEXICO	Date Sampled	: 10/22/92
Lease	: HOOVER	Analysis No.	: 934
Well	: SWD	Analyst	: ROZANNE JOHNSON
Sample Pt.	: WELLHEAD		

STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO₃ Scaling Tendency

S.I. =	-0.3	at	80 deg. F	or	27 deg. C
S.I. =	-0.3	at	100 deg. F	or	38 deg. C
S.I. =	-0.3	at	120 deg. F	or	49 deg. C
S.I. =	-0.3	at	140 deg. F	or	60 deg. C
S.I. =	-0.2	at	160 deg. F	or	71 deg. C

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS (Skillman-McDonald-Stiff Method) Calcium Sulfate

S =	4238	at	80 deg. F	or	27 deg C
S =	4430	at	100 deg. F	or	38 deg C
S =	4510	at	120 deg. F	or	49 deg C
S =	4562	at	140 deg. F	or	60 deg C
S =	4502	at	160 deg. F	or	71 deg C

Petrolite Oilfield Chemicals Group

Respectfully submitted,
ROZANNE JOHNSON

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Encl. Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. <u>30-025-29569</u>
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. LG 3345
7. Lease Name or Unit Agreement Name Hoover ADR State
8. Well No. 1
9. Pool name or Wildcat Sanmal Queen

SUNDARY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER ☐ Order No. SWD-402	
2. Name of Operator YATES PETROLEUM CORPORATION (505) 748-1471	
3. Address of Operator 105 South 4th St., Artesia, New Mexico 88210	
4. Well Location Unit Letter <u>I</u> : <u>1650</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>East</u> Line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4139' GR	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: Convert to SWD (SWD-402) ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

10-30-90. POOH w/rods, pump and tubing. TIH with workstring and packer. Acidized existing perforations 3767-3776' w/1500 gals 15% HCL acid. Swab back load. TIH w/120 jts 2-7/8" J-55 plastic-coated tubing set 3698'. Guiberson Uni VI nickel plated-packer set 3700'. Well converted to SWD Order No. 402. 1st injection 11-8-90.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Juanita Goodlett TITLE Production Supervisor DATE 1-9-91
TYPE OR PRINT NAME Juanita Goodlett TELEPHONE NO. 505/748-1471

(This space for State Use) ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT SUPERVISOR

APPROVED BY _____ TITLE _____ DATE 1-11-1991
CONDITIONS OF APPROVAL, IF ANY:



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION
 HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
 GOVERNOR

7-31-90

POST OFFICE BOX 1980
 HOBBS, NEW MEXICO 88241-1980
 (505) 393-6161

OIL CONSERVATION DIVISION
 P. O. BOX 2088
 SANTA FE, NEW MEXICO 87501

Subd - 402

RE: Proposed:

MC _____
 DHC _____
 NSL _____
 NSP _____
 SWD X _____
 WFX _____
 PMX _____

Gentlemen:

I have examined the application for the:

Yates Pet. Corp. *Hoover AOR State #1-I* *1-17-33*
 Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

YOU MIGHT LOOK AT PLUGGED WELLS
MAY NEED TO ADD ONE PLUG

Yours very truly,

Jerry Sexton
 Jerry Sexton
 Supervisor, District 1

/ed

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTOIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

NO. OF COPIES RECEIVED	
FILE	
U.S.D.	
LAND OFFICE	
TRANSPORTER	OIL
OPERATION	GAS
PRODUCTION OFFICE	
Operator	

I. Operator
Yates Petroleum Corporation

Address

207 South 4th St., Artesia, NM 88210

Reason(s) for filing (Check proper box)

New Well ☒Recompletion ☐Change in Ownership ☐

Change in Transporter oil:

Oil ☐Casinghead Gas ☐Dry Gas ☐Condensate ☐

Other (Please explain)

CASINGHEAD GAS MUST NOT
FLARED AFTER 6-1-86
UNLESS AN EXCEPTION TO R-407
IS OBTAINED.If change of ownership give name
and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Hoover ADR State	1	Und. Queen <i>Queen</i>	State, Federal or Fee State	LG-3345
Location				
Unit Letter	I	1650 Feet From The	South Line and 990 Feet From The	East
Line of Section	1	Township 17S	Range 33E	NMPM, Lea County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)					
Tesoro Crude Oil Co.	PO Box 2297, Midland, TX 79702					
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)					
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	I	1	17s	33e	No	

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well ☒	Gas Well ☐	New Well ☒	Workover ☐	Deepen ☐	Plug Back ☐	Same Res'v. ☐	Diff. Res'v. ☐
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
12-31-85	4-10-86		11825'		4352'			
Elevations (DF, RKH, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
4139' GR	Queen		3767'		3698'			
Perforations					Depth Casing Shoe			
3767-74'					4530'			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
24"	20"		38'					
17 1/2"	13-3/8"		448'		425			
11"	8-5/8"		4530'		1725			
	2-7/8"		3698'					

V. TEST DATA AND REQUEST FOR ALLOWABLE
OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

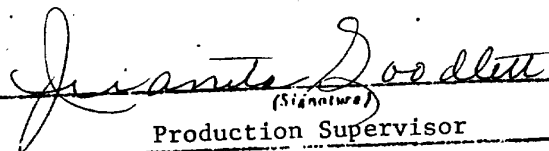
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
3-4-86	4-10-86	Pumping	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
24 hrs	-	-	-
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF
544	48	496	TSTM

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (what-in)	Casing Pressure (what-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


(Signature)
Production Supervisor4-22-86
(Date)

OIL CONSERVATION DIVISION

APR 25 1986

APPROVED

BY ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

TITLE

This form is to be filed in compliance with RULE 1102.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviated tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of own well name or number, or transporter, or other such change of condition.

Separate Form C-104 must be filed for each pool in multi well wells.

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APR 24 1986
C.C.B.
HOBBS OFFICE

STATE OF NEW MEXICO
MINE AND MINERALS DEPARTMENTForm C-104
Revised 10-1-70OIL CONSERVATION DIVISION
P. O. BOX 7000
SANTA FE, NEW MEXICO 87501REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

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TRANSPORTER	☒ OIL ☐ GAS
OPERATION	
PRODUCTION OFFICE	
Operator	

Yates Petroleum Corporation

Address
105 South 4th St., Artesia, NM 88210

Reason(s) for filing (Check proper box)

New Well	☐	Change in Transporter of:	
Recompletion	☐	Oil	☒
Change in Ownership	☐	Casinghead Gas	☐
		Dry Gas	☐
		Condensate	☐

Other (Please explain)

CHANGE TRANSPORTER CRUDE OIL
EFFECTIVE 6-1-87If change of ownership give name
and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name Hoover ADR State	Well No. 1	Pool Name, including Formation Sanmal-Queen	Kind of Lease State, Federal or Fee	Lease No. LG 3345
Location Unit Letter <u>I</u> ; <u>1650</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>East</u>				
Line of Section <u>1</u> Township <u>17S</u> Range <u>33E</u> , NMPM, <u>Lea</u> County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐ The Permian Corporation Permian (EN. 9 / 1 / 87)	Address (Give address to which approved copy of this form is to be sent) PO Box 1183, Houston, TX 77001
Name of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐ Warren Petroleum Co.	Address (Give address to which approved copy of this form is to be sent) PO Box 1589, Tulsa, OK 74101
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. I 1 17s 33e
Is gas actually connected?	When Yes 9-29-86

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res't.	Diff. Res't.
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKH, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL. (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

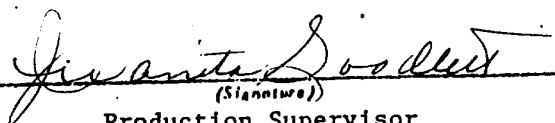
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MCF	Gravity of Condensate
Testing Method (pistol, back pr.)	Tubing Pressure (about-in)	Casing Pressure (Shot-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


(Signature)
Production Supervisor

5-19-87

(Date)

OIL CONSERVATION DIVISION

APPROVED MAY 21 1987, 19BY Orig. Signed by
Paul Kautz
GeologistTITLE _____
This form is to be filed in compliance with RULE 100.
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
All sections of this form must be filled out completely for allowable on new and recompleted wells.
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition. Separate Form C-104 must be filed for each pool in multiple

RECEIVED

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MAY 20 1987
OCD
HOBBS OFFICE

STATE OF NEW MEXICO
OIL AND MINERALS DEPARTMENTForm C-104
Revised 10-1-78OIL CONSERVATION DIVISION
P. O. BOX 7088
SANTA FE, NEW MEXICO 87501REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

NO. OF COPIES REQUIRED	
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LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	
PRODUCTION OFFICE	
Operator	

Yates Petroleum Corporation

Address
105 South 4th St., Artesia, NM 88210

Reason(s) for filing (Check proper box)

New Well ☐
Recompletion ☐
Change in Ownership ☐

Change in Transporter of:

Oil ☐ Dry Gas ☐
Casinghead Gas ☐ Condensate ☐

Other (Please explain)

CASINGHEAD GAS CONNECTION.

If change of ownership give name
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	State	Lease No.
Hoover ADR State	1	Sanmal-Queen	State, Federal or Fee	State	LG-3345
Location					
Unit Letter	I	1650	Feet From The	South Line and	990
Feet From The East					
Line of Section	1	Township	17S	Range	33E
, NMPH, Lea County					

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)	
Tesoro Crude Oil Co.	PO Box 2297, Midland, TX 79702	
Name of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)	
Warren Petroleum Co.	PO Box 1589, Tulsa, OK 74101	
If well produces oil or liquids, give location of tanks.	Unit	Sec.
	I	1
	Twp.	Rge.
	17S	33e
Is gas actually connected?	When	
Yes	9-29-86	

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res't.	Diff. Res't.
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
Elevations (DP, RKH, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
Perforations	Depth Casing Shoe							

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL. (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

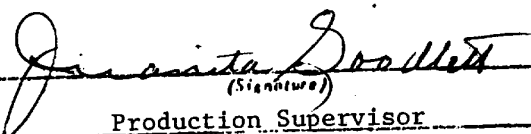
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MCF	Gravity of Condensate
Testing Method (pump, back pr.)	Tubing Pressure (shot-in)	Casing Pressure (shot-in)	Choke Size

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


(Signature)
Production Supervisor
(Title)
9-29-86
(Date)

OIL CONSERVATION DIVISION

APPROVED **OCT 1 1986**, 19
BY **ORIGINAL SIGNED BY JERRY SEXTON**
DISTRICT I SUPERVISOR
TITLE

This form is to be filed in compliance with RULE 110.
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
All sections of this form must be filled out completely for allowable on new and recompleted wells.
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.
Separate Form C-104 must be filed for each pool in multiple completed wells.

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SEP 30 1986
P.C.P.
HOBBS OFFICE

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTForm C-104
Revised 10-1-78OIL CONSERVATION DIVISION
P. O. BOX 7088
SANTA FE, NEW MEXICO 87501REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

NO. OF COPIES REQUIRED	
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LAND OFFICE	
TRANSPORTER	☐ OIL ☐ GAS
OPERATOR	
PRODUCTION OFFICE	

Operator Yates Petroleum Corporation			
Address 207 South 4th St., Artesia, NM 88210			
Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well ☐	Change in Transporter of: ☐	Request 2000 bbl test allowable. Perforations: 3767-74' Queen	
Recompletion ☐	Oil ☐ Dry Gas ☐		
Change in Ownership ☐	Casinghead Gas ☐ Condensate ☐		

If change of ownership give name
and address of previous owner _____

DESCRIPTION OF WELL AND LEASE

Lease Name Hoover ADR State	Well No. 1	Pool Name, including Formation Undesignated Queen	Kind of Lease State, Federal or Fee State	Lease No. LG-3345
Location Unit Letter <u>I</u> ; <u>1650</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>East</u>				
Line of Section <u>1</u> Township <u>17S</u> Range <u>33E</u> , NMPLM, <u>Lea</u> County				

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent) PO Box 2297, Midland, TX 79702					
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)					
If well produces oil or liquids, give location of tanks.	Unit I	Sec. 1	Twp. 17s	Rge. 33e	Is gas actually connected? NO	When

If this production is commingled with that from any other lease or pool, give commingling order number: _____

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'ty.	Diff. Res'ty.
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

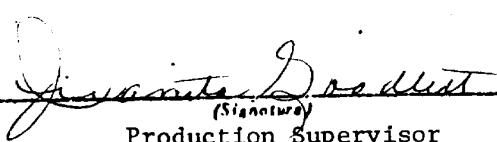
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (shut-in)	Casing Pressure (shut-in)	Choke Size

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


Production Supervisor(Title)
3-21-86

(Date)

OIL CONSERVATION DIVISION

APPROVED MAR 24 1986, 19BY ORIGINAL SIGNED BY JERRY SEXTONTITLE DISTRICT I SUPERVISOR

This form is to be filed in compliance with RULE 110.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition. Separate Form C-104 must be filed for each pool in multiply

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MAR 24 1986
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTOIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease State ☒ Fee ☐	
5. State Oil & Gas Lease No. LG 3345	
7. Unit Agreement Name	
8. Farm or Lease Name Hoover ADR State	
9. Well No. 1	
10. Field and Pool, or Wildcat Und. Queen	
12. County Lea	
18. Elevations (DF, RKB, RT, GR, etc.) 4139' GR	
19. Elev. Casinghead 0-38'	
25. Was Directional Survey Made No	
27. Was Well Cored No	

1a. TYPE OF WELL OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐	
b. TYPE OF COMPLETION NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐	
2. Name of Operator Yates Petroleum Corporation	
3. Address of Operator 207 South 4th St., Artesia, NM 88210	
4. Location of Well UNIT LETTER <u>I</u> LOCATED <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>1</u> TWP. <u>17S</u> RGE. <u>33E</u> NMPM	
15. Date Spudded 12-31-85	16. Date T.D. Reached 2-15-86
17. Date Compl. (Ready to Prod.) 4-10-86	18. Elevations (DF, RKB, RT, GR, etc.) 4139' GR
23. Total Depth 11825'	21. Plug Back T.D. 4352'
22. If Multiple Compl., How Many 38-11825'	
23. Intervals Drilled By Rotary Tools Cable Tools 0-38'	
24. Producing Interval(s), of this completion - Top, Bottom, Name 3767-74' Queen	
25. Type Electric and Other Logs Run CNL/FDC; DLL	

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"		38'	24"		
13-3/8"	61#	448'	17 1/2"	425 sx	
8-5/8"	32 & 24#	4530'	11"	1725 sx	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	3698'	-

31. Perforation Record (Interval, size and number) 3767-74' w/14 .42" Holes (2 SPF)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL 3767-74' AMOUNT AND KIND MATERIAL USED w/2000g. 7 1/2% acid + ball sealers.	
--	--	---	--

33. PRODUCTION							
Date First Production 3-4-86		Production Method (Flowing, gas lift, pumping - Size and type pump) Pumping				Well Status (Prod. or Shut-in) Producing	
Date of Test 4-10-86	Hours Tested 24	Choke Size -	Prod'n. For Test Period 48	Oil - Bbl. 48	Gas - MCF TSTM	Water - Bbl. 496	Gas - Oil Ratio -
Flow Tubing Press. -	Casing Pressure -	Calculated 24-Hour Rate 48	Oil - Bbl. 48	Gas - MCF TSTM	Water - Bbl. 496	Oil Gravity - API (Corr.) 36.4	
34. Disposition of Gas (Sold, used for fuel, vented, etc.)						Test Witnessed By Norbert McCaw	

35. List of Attachments Deviation Survey, DST's (10)	
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.	
SIGNED <u>Francis Goodlet</u>	TITLE <u>Production Supervisor</u> DATE <u>4-22-86</u>

RECEIVED
APR 21 1986
S.C.D.
HUMAN SERVICES

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filled in quadruplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
Rustler	1534	T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Anhy		T. Strawn		T. Kirtland-Fruitland		T. Penn. "C"	
T. Salado Salado	1780	T. Atoka		T. Pictured Cliffs		T. Penn. "D"	
T. Tausill Tausill	2630	T. Miss		T. Cliff House		T. Leadville	
T. Yates	2788	T. Devonian		T. Menefee		T. Madison	
T. 7 Rivers		T. Silurian		T. Point Lookout		T. Elbert	
T. Queen	3755	T. Montoya		T. Mancos		T. McCracken	
T. Grayburg		T. Simpson		T. Gallup		T. Ignacio Qtzite	
T. San Andres	4563	T. McKee		Base Greenhorn		T. Granite	
T. Glorieta	5993	T. Ellenburger		T. Dakota			
T. Paddock		T. Gr. Wash		T. Morrison			
T. Elinebry		T. Granite		T. Todilto			
T. Tubb	7330	T. Delaware Sand		T. Entrada			
T. Drinkard		T. Bone Springs		T. Wingate			
T. Abo	8090	T. XX Marker	10155	T. Chinle			
T. Wolfcamp Lime	9778	T. Kemnitz	10860	T. Permian			
T. Penn.		T. Seaman	11568	T. Penn. "A"			
T. Cisco (Bough C)							

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 4, from.....to.....
 No. 2, from.....to..... No. 5, from.....to.....
 No. 3, from.....to..... No. 6, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....
 No. 4, from.....to.....feet.....

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	30	30	Surface				
30	4560	4530	Anhydrite, Dolomite, Sand				
4560	5000	440	Dolomite				
5000	5950	950	Dolomite, Anhydrite, Cht				
5950	6540	590	Dolomite, Sand, Shale				
6540	6840	300	Dolomite, Cht, Sand, Anhy				
6840	6980	140	Dolomite, Cht, Anhydrite				
6980	7180	200	Dolomite, Anhydrite				
7180	7650	470	Dolomite, Shale, Sand				
7650	8600	950	Dolomite, Anhydrite, Shale				
8600	9680	1080	Dolomite, Lm, Shale, Anhy				
9680	11825	2145	Lime, Dolo, Shale, Cht				

RECEIVED
APR 24 1986
C.F.D.
HOBBS OFFICE

WELL NAME AND NUMBER Howver 'ADR' State #1 204LOCATION Section 1, T17S, R33E, Lea County, New Mexico
(New Mexico give U.S.T.&R. - Texas give S, BLK, SURV. and TWP)OPERATOR Yates Petroleum CorporationDRILLING CONTRACTOR MORANCO Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

Degrees and Depth	Degrees and Depth	Degrees and Depth	Degrees and Depth
1/4 200	1/4 4629	3/4 9855	
1/4 448	1/4 4880	3/4 10193	
1/2 868	3/4 5264	1/2 10626	
1/2 1241	1 6068	3/4 10903	
3/4 1643	1 6150	1 1/4 11240	
3/4 2449	1 6559	2 11606	
3/4 2778	3/4 6980	1 11825	
3/4 3047	3/4 7358		
1/4 3436	3/4 7758		
1/4 3773	1 8654		
1 4173	3/4 9054		
3/4 4530	3/4 9457		

Drilling Contractor MORANCO Drilling, Inc.By Wiley Gilmore
Wiley Gilmore - Marketing ManagerSubscribed and sworn to before me this 21st day of February 19 86

My Commission expires:

January 30, 1989Susie Branyon
Notary Public Susie Branyon
Lea County, New Mexico

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YATES PETROLEUM CORPORATION

DRILL STEM TESTS (CONT'D)

Hoover ADR State #1 LG-3345

Unit I, Sec. 1-T17S-R33E

Lea County, New Mexico

DST #8 11287-11371' (84') SOMBRERO WOLFCAMP: TO 15"; SI 60"; TO 60"; SI 180". Opened tool with weak blow 1/2" in bubble hose. Increase to 1" in bubble after 5 minutes. In 15 minutes decreased to 1/2" in bubble with very weak blow. Re-opened tool with very weak blow. in 5 minutes had 1" in bubble with 1 psi. Decreased to 3/4" in 30 minutes then to 1/2" in 50 minutes. RECOVERY: 60' drilling mud. SAMPLER: 2400 cc drilling mud, 100 psi (no gas). BHT: 156°. PRESSURES: BOTTOM: IHP 5562; IFP 80; FFP 80; ISIP 180; IFP 80; FFP 80; FSIP 280; FHP 5550.

DST #9 11596-11649' (53') SEAMAN: TO 15"; SI 60"; TO 60"; SI 180". Opened tool with very weak blow 1" in bubble hose. Increased to 1-1/2" in bucket in 10 minutes and remained. Re-opened with very weak blow. In 10 minutes had 1/2" in bucket; in 20 minutes 1"; 30 minutes 1-1/2". Decreased to 1" in 50 minutes and remained. RECOVERY: 100' drilling mud. SAMPLER: 1800 cc drilling mud, 40 psi. BHT: 156°. PRESSURES: BOTTOM: 1st open - IHP 5852, IFP 82; FFP 82; ISIP 5463; IFP 95, FFP 95, FSIP 5601; FHP 5789.

DST #10 11668-11825' (157') SEAMAN: TO 5"; SI 60"; TO 60"; SI 180". Opened with weak blow, 1" on bubble. Re-opened with weak blow, 2" on bubble. SAMPLER: 6.5 cfg, 20 cc oil, 100 cc mud at 950 psi. RECOVERY: 160' drilling fluid, slight gas and oil cut (trace oil). PRESSURES: BOTTOM: 1st open - IHP 5946; IFP 121, FFP 121; ISIP 631; 2nd open - IFP 121, FFP 146; FSIP 1370; FHP 5920.

YATES PETROLEUM CORPORATION

DRILL STEM TESTS

Hoover ADR State #1 LG-3345
Unit I, Sec. 1-T17S-R33E
Lea County, New Mexico

DST #1 4590-4629' (39') SAN ANDRES: TO 30"; SI 90: TO 60"; SI 180". First open - opened with very weak blow. Remained very weak for 15 minutes. No blow after 20 minutes, 1/8" on bubble hose. In 5 minutes had 1 1/4" in 5-gal bucket water. Had 3 1/4" in bucket after 35 minutes. Decreased to 1" in 55 minutes. SAMPLER: 6 psi, .149 cfg, 100 cc water (total fluid 100 cc). SAMPLER: 4' oil cut water. BHT: 113°. PRESSURES: BOTTOM: 1st open IHP 1992; IFP 26; FFP 39; ISIP 131; 2nd open IFP 26, FFP 26; FSIP 289.

DST #2 4843-4879' (36') SAN ANDRES: TO 30"; SI 90"; TO 60"; SI 180". 1st open - opened with very weak blow, 1/2" in bucket. No increase for remainder of open. 2nd open - opened with weak blow 1/2" in bucket. Remained weak for remainder of open. RECOVERY: 15 psi, 500 cc water slight oil cut, .1794 cft. SAMPLER: 8' drilling fluid, slight oil cut. BHT: 113°. PRESSURES: BOTTOM: 1st open - IHP 2150; IFP 26; FFP 26; ISIP 131; 2nd open - ISP 39; FFP 236; FHP 2150.

DST #3 6086-6150' (64') GLORIETA: TO 30"; SI 90"; TO 60"; SI 240". 1st open - opened with weak blow 1/2" bucket. Had small increase in blow for 10 minutes. Blow stabilized 1" in bubble bucket. 2nd open - opened with no blow. In 30 minutes had very weak blow 1/8" in bucket. In 30 minutes had small increase in blow to 1/2" in bucket. Stabilized 1/2" in bucket after 40 minutes. RECOVERY: 127' water + 3' oil. SAMPLER: at 40 psi, 2500 cc water with trace of oil. PRESSURES: BOTTOM: IHP 2688; IFP 54; FFP 81, ISIP 135; IFP 81; FFP 108; FSIP 162; FHP 2688.

DST #4 10186-10211' (25'): WOLFCAMP: TO 30"; SI 60"; TO 90"; SI 240". Opened tool with weak blow 2" in bucket. Increased to 3 1/2" in bucket in 20 minutes and remained. Reopened with strong blow, 1/4 psi at surface. Increased to 1/2 psi in 20 minutes; 3/4 psi in 20 minutes with strong blow. In 60 minutes, pressure increased to 1 psi; 1-1/4 psi in 70 minutes and remained. RECOVERY: 36' oil, 57' water with oil cut and 87' water. SAMPLER: 1200 cc oil, 800 cc water, .27 cfg, 120 psi. Gravity: 45°. BHT: 178°. PRESSURES: BOTTOM: 1st open - IHP 4780; IFP 90; FFP 108; ISIP 2147; 2nd open - IFP 126; FFP 144; FSIP 3830; FHP 4780.

DST #5 10857-10292' (72') KEMNITZ: TO 30"; SI 90"; TO 60"; SI 180". Opened tool with weak blow on bubble hose. In 5 minutes had 2" on bubble hose. Increased 4" on bubble hose in 20 minutes and stabilized. Reopened with 1/4 psi at surface with weak blow. Bubble hose reached bottom of bucket in 15 minutes with weak blow. RECOVERY: 1' oil and 70' drilling fluid. SAMPLER: 75 cc oil and 1925 cc drilling fluid, 110 psi. BHT: 180°. PRESSURES: 1st open - IHP 5527; IFP 131, FFP 113; ISIP 349; 2nd open - IFP 113; FFP 113; FSIP 632; FHP 5404.

DST #6 1173-11240' (67') SOMBRERO WOLFCAMP: TO 30"; SI 90"; TO 30"; SH 120". Opened tool with weak blow on bubble hose (1 1/2"). Decreased to 3/4" in 15 minutes, 1/2" in 25 minutes. Reopened tool for final flow. Opened tool, no blow at surface. RECOVERY: 210' drilling mud. SAMPLER: 2450 cc drilling fluid; 10 psi, .02 cfg. BHT: 161°. PRESSURES: BOTTOM: 1st open - IHP 5641; IFP 173; FFP 173; ISIP 216; 2nd open - IFP 173; FFP 173; FSIP 216; FHP 5553.

DST #7: MISRUN.

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Form C-103
Revised 10-1-78

5a. Indicate Type of Lease	
State ☒	Fee ☐
5. State Oil & Gas Lease No. LG 3345	
7. Unit Agreement Name	
8. Farm or Lease Name Hoover ADR State	
9. Well No. 1	
10. Field and Pool, or Wildcat Undes. Queen	
12. County Lea	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER- ☐
2. Name of Operator Yates Petroleum Corporation
3. Address of Operator 207 South 4th St., Artesia, NM 88210
4. Location of Well UNIT LETTER <u>I</u> , <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE, SECTION <u>1</u> TOWNSHIP <u>17S</u> RANGE <u>33E</u> NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 4139' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOB ☐

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

OTHER Perforate, Treat ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

TD 11825'; PBD 4352'.

WIH and perforated 3767-3774' w/14 . 2" holes (2 SPF). Acidized perms 3767-74' w/2000 gals 7½% NEFE acid + ball sealers.
2-26-86. Set pumping equipment.

Note: Tested casing below perforations to 2100#, OK.

TITE HOLE!

TITE HOLE!

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Jerry Sexton TITLE Production Supervisor DATE 3-5-86
ORIGINAL SIGNED BY JERRY SEXTON
APPROVED BY DISTRICT I SUPERVISOR TITLE DATE MAR 7 - 1986

CONDITIONS OF APPROVAL, IF ANY:

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SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

3a. Indicate Type of Lease State ☒ Fee ☐
5. State Oil & Gas Lease No. LG 3345
7. Unit Agreement Name
8. Farm or Lease Name Hoover ADR State
9. Well No. 1
10. Field and Pool, or Wildcat Undes. Queen
12. County Lea

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐
2. Name of Operator Yates Petroleum Corporation
3. Address of Operator 207 South 4th St., Artesia, NM 88210
4. Location of Well UNIT LETTER <u>I</u> <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE, SECTION <u>1</u> TOWNSHIP <u>17S</u> RANGE <u>33E</u> NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 4139' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOB ☐	OTHER <u>Plugback</u> ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

2-17-86. Verbal permission obtained from Mr. Jerry Sexton, NMOCD, Hobbs, by Mr. Al Springer, Yates Petroleum to plug back well to Queen formation. Well plugged back as follows:

Plug #1: Set 11103' w/120 sx Class "H". PD 4:30 PM 2-17-86. WOC 1-1/2 hrs.
Plug #2: Set 9824' w/40 sx Class "H". PD 6:30 PM 2-17-86. WOC 1-1/2 hrs.
Plug #3: Set 8159' w/40 sx Class "H". PD 9:30 PM 2-17-86. WOC 1-1/2 hrs.
Plug #4: Set 6062' w/40 sx Class "H" with 2% CaCl₂. PD 12:15 AM 2-18-86. WOC 1-1/2 hrs.
Plug #5: Set 4579' w/40 sx Class "H" with 2% CaCl₂. PD 2:30 AM 2-18-86. WOC 1-1/2 hrs.

TITE HOLE

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Eddie W. Seay TITLE Production Supervisor DATE 2-20-86
APPROVED BY Eddie W. Seay TITLE Oil & Gas Inspector DATE FEB 24 1986
CONDITIONS OF APPROVAL, IF ANY:

IPANM 002218

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

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TITE HOLE

5a. Indicate Type of Lease State ☒ Fee ☐
5. State Oil & Gas Lease No. LG 3345
7. Unit Agreement Name
8. Farm or Lease Name Hoover ADR State
9. Well No. 1
10. Field and Pool, or wildcat Undes. Wolfcamp
11. Elevation (Show whether DF, RT, GR, etc.) 4139' GR
12. County Lea

SUNDY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL UP TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE APPLICATION FOR PERMIT TO DRILL (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

Name of Operator
Yates Petroleum Corporation

Address of Operator
207 South 4th St., Artesia, NM 88210

Location of Well
UNIT LETTER I 1650 FEET FROM THE South LINE AND 990 FEET FROM
THE East LINE SECTION 1 TOWNSHIP 17S RANGE 33E N.M.P.M.

6. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPERATIONS ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	
		OTHER <u>Intermediate Casing</u> ☒	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

TITE HOLE!

Ran 107 joints 8-5/8" J-55 ST&C casing as follows: 59 joints 32#; 47 joints 24# and 1 joint 32#, casing set 4530'. 1-Texas Pattern guide shoe set 4530'. Float collar set 4488'. Cemented w/1200 sx Halliburton Lite + 18#/sx salt + 1/4#/sx Floecle. Tailed in w/525 sx Class C w/2% CaCl2. Compressive strength of cement - 1250 psi in 12 hrs. PD 4:15 AM 1-16-86. Bumped plug to 1000 psi, released pressure and float held okay. Cement circulated 50 sx to pit. WOC. Drilled out 6:30 PM 1-16-86. WOC 14 hrs and 15 minutes. NU and tested to 1000# for 30 minutes, OK. Reduced hole to 7-7/8". Drilled plug and resumed drilling.

TITE HOLE!

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Jerry Sexton
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT 1 SUPERVISOR

TITLE Production Supervisor

DATE 1-21-86

APPROVED BY

TITLE

DATE

JAN 24 1986

CONDITIONS OF APPROVAL, IF ANY:

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P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease State ☒ Fee ☐	
5. State Oil & Gas Lease No. LG 3345	
7. Unit Agreement Name	
8. Farm or Lease Name Hoover ADR State	
9. Well No. 1	
10. Field and Pool, or wildcat Undes. Wolfcamp	
11. Elevation (Show whether DF, RT, GR, etc.) 4139' GR	
12. County Lea	

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPERATIONS ☒	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASINGS TEST AND CEMENT JOBS ☐	OTHER ☒ Surface Casing

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Resumed drilling 17-1/2" hole with rotary rig 10:15 AM 1-5-86. Ran 11 joints 13-3/8" J-55 ST&C casing as follows: 5 jts 61# and 6 jts 54.5# (total 453') casing. set at 448'. 1-Texas Pattern guide shoe set 448'. Insert float set 407'. Cemented w/425 sx Class "C" + 1/4#/sx Flocele + 2% CaCl2. Compressive strength of cement - 1250 psi in 12 hrs. PD 6:15 PM 1-5-86. Bumped plug to 1000 psi, released pressure and float held okay. Cement circulated 45 sx to pit. WOC. Drilled out 9:00 AM 1-6-86. WOC 14 hrs and 45 minutes. Cut off and welded on flow nipple. Reduced hole to 11". Drilled plug and resumed drilling.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief

SIGNED Eddie W. Seay TITLE Production Supervisor DATE 1-7-86
 APPROVED BY Oil & Gas Inspector TITLE _____ DATE JAN 10 1986
 CONDITIONS OF APPROVAL, IF ANY:

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P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-103
Revised 10-1-78

5a. Indicate Type of Lease	
State ☒	Fee ☐
5. State Oil & Gas Lease No. LG 3345	
7. Unit Agreement Name	
8. Farm or Lease Name Hoover ADR State	
9. Well No. 1	
10. Field and Pool, or wildcat Undes. Wolfcamp	
12. County Lea	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEFEIN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒	GAS WELL ☐	OTHER ☐
Name of Operator Yates Petroleum Corporation		
Address of Operator 207 South 4th St., Artesia, NM 88210		
Location of Well UNIT LETTER <u>I</u> <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE. SECTION <u>1</u> TOWNSHIP <u>17S</u> RANGE <u>33E</u> NMPM.		

11. Elevation (Show whether DF, RT, GR, etc.) 4139' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOBS ☐	OTHER <u>Spud well</u> ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Spudded 24" hole at 8:30 AM 12-31-85 with Abbott Brothers Cable Tool. Notified Bonnie Pritchard, NMOC, Hobbs, NM at 1:30 PM 12-31-85. Set 38' of 20" conductor pipe.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Juanita Goodlett TITLE Production Supervisor DATE 1-3-86

ORIGINAL SIGNED BY JERRY BEXTON
DISTRICT 1 SUPERVISOR

APPROVED BY _____ TITLE _____

DATE

JAN 7 - 1986

CONDITIONS OF APPROVAL, IF ANY:

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30-025-29549

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-101
Revised 10-1-78

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OPERATOR	

5A. Indicate Type of Lease
STATE ☒ REC ☐
5. State Oil & Gas Lease No.
LG-3345

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐		DRILL ☒ DEEPEN ☐ PLUG BACK ☐	
2. Name of Operator Yates Petroleum Corporation		7. Unit Agreement Name	
3. Address of Operator 207 South Fourth Street - Artesia, NM 88210		8. Farm or Lease Name Hoover "ADR" State	
4. Location of Well UNIT LETTER <u>I</u> LOCATED <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>1</u> TWP. <u>17S</u> RGE. <u>33E</u> NMPM		9. Well No. 1	
		10. Field and Pool, or Wildcat Undes. Wildcat	
		12. County Lea	
		19. Proposed Depth 11800'	
		19A. Formation Wolfcamp	
		20. Rotary or C.T. Rotary	
21. Elevations (Show whether DH, RT, etc.) 4139' GR		21A. Kind & Status Plug. Bond Blanket	
		21B. Drilling Contractor Undesignated	
		22. Approx. Date Work will start ASAP	

23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	54.5# J-55	Approx. 500'	300 sacks	Circulate
12-1/4"	8-5/8"	32# J-55	" 4600'	1800 sacks	Circulate
7-7/8"	5-1/2"	17 & 20# N-80	11800'	700 sacks	

We propose to drill and test the Wolfcamp formation and intermediate zones. Approx. 500' of surface casing will be set with cement circulated to surface to shut off gravel and cavings. Intermediate casing will be set at approximately 4600' with cement circulated. If productive, 5-1/2" casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: Spud mud to 500', native mud and oil to 4600', fresh water to 9500' and brine polymer to 11800'.

BOP PROGRAM: BOP's to be installed on intermediate casing and tested daily.

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Cy Couran Title Regulatory Agent Date Dec. 27, 1985
(This space for State Use)

OIL & GAS INSPECTOR

APPROVED BY Eddie W. Sany 1 TITLE Inspector DATE DEC 27 1985
CONDITIONS OF APPROVAL, IF ANY:

IPANM 002225

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DEC 27 1985
FBI OFFICE

IPANM EXHIBIT 40

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

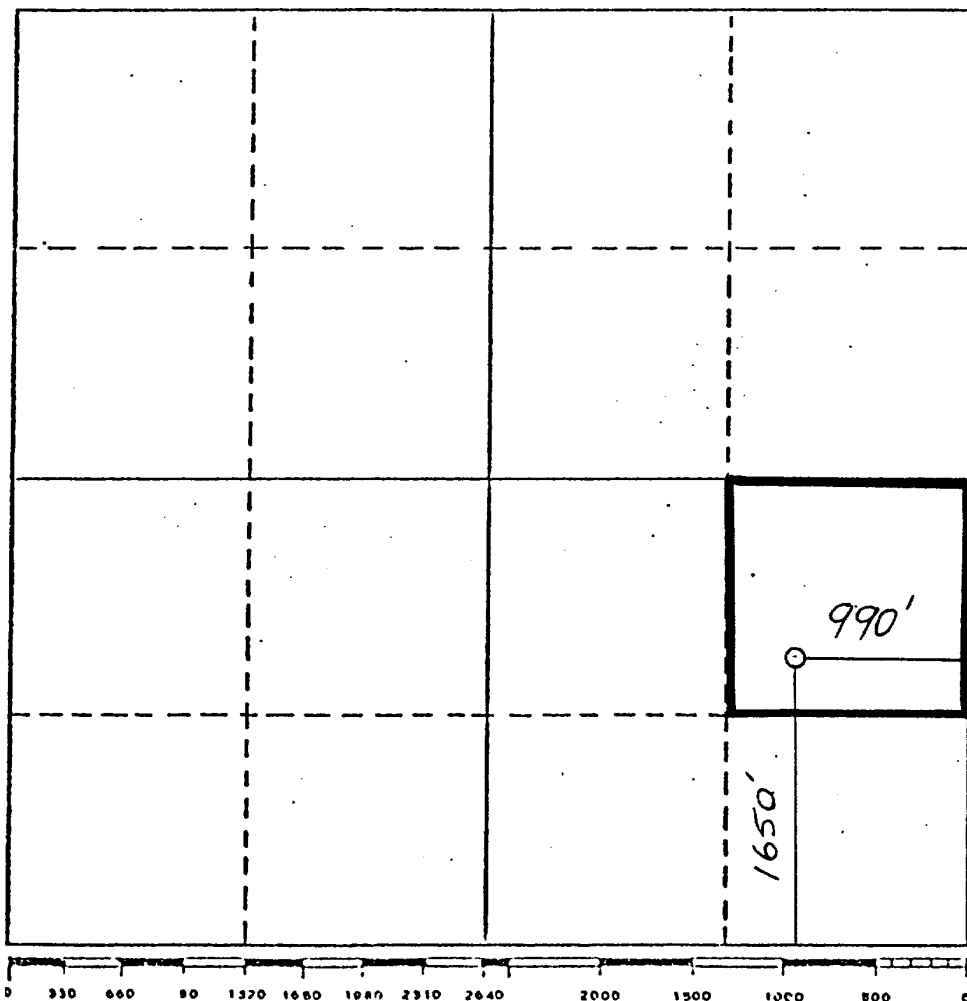
Operator YATES PETROLEUM CORPORATION			Lease HOOVER ADR STATE		Well No. 1
Unit Letter I	Section 1	Township 17S	Range 33E	County Lea	
Actual Footage Location of Well: 1650 feet from the South line and 990 feet from the East line					
Ground Level Elev. 4139'	Producing Formation Wolf Camp		Pool Under Wolf Camp	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Cy Cowan
Name

Cy Cowan

Position
Regulatory Agent

Company

Yates Petroleum Corporation

Date

December 27, 1985

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Dec. 26, 1985

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

[Signature]
Herschel
Certificate No. **3640**



IPANM 002227

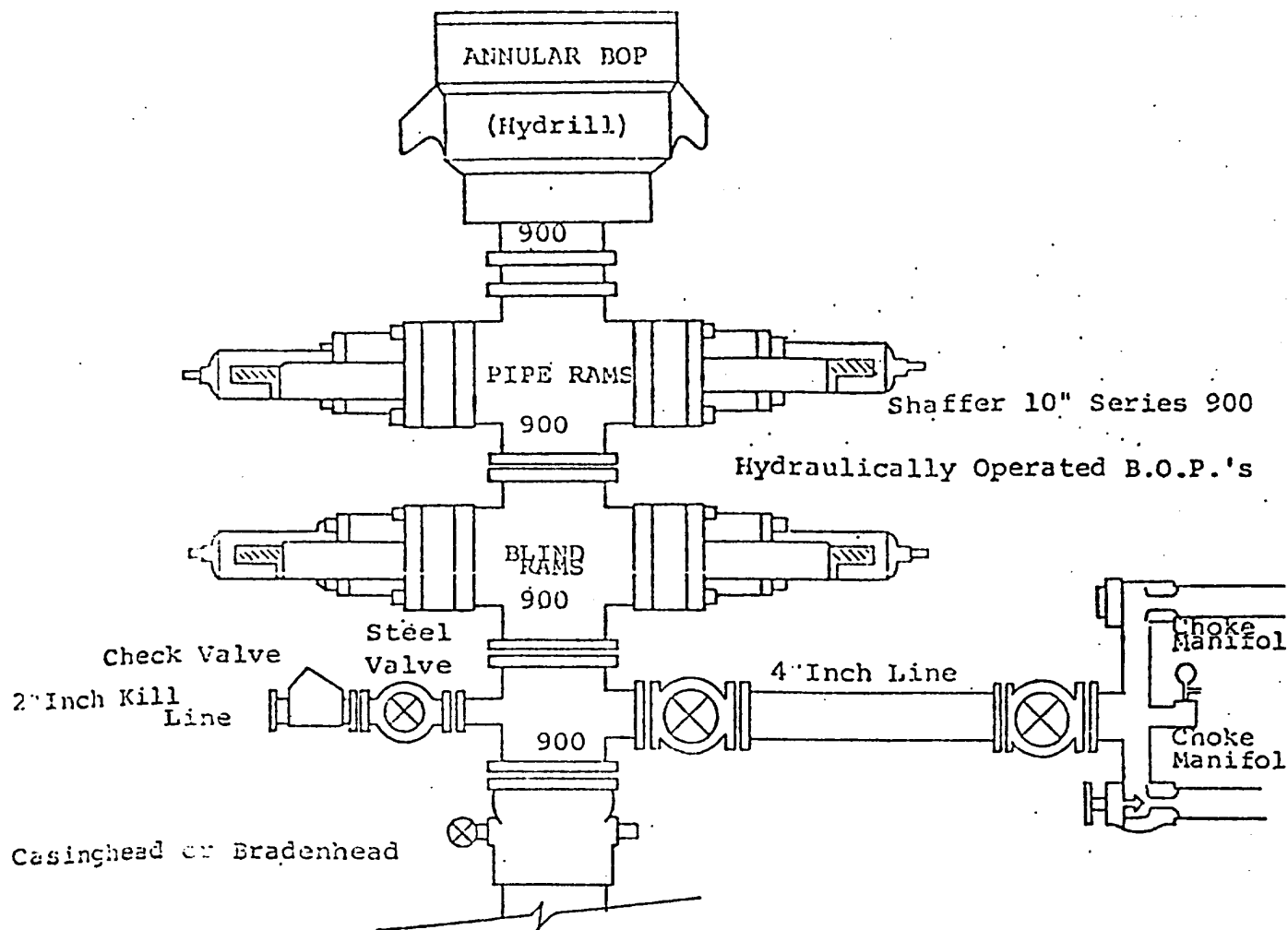
IPANM EXHIBIT 40

RECEIVED

DEC 27 1985

OFFICE
HOBBS OFFICE

IPANM 002228



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. All preventers to be hydraulically operated with secondary manual control installed prior to drilling out from under casing.
2. Choke outlet to be a minimum of 4" diameter.
3. Kill line to be of all steel construction of 2" minimum diameter.
4. All connections from operating manifolds to preventers to be all steel. hole or tube a minimum of one inch in diameter.
5. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate the B.O.P.'s.
6. All connections to and from preventer to have a pressure rating equivalent to that of the B.O.P.'s.
7. Inside blowout preventer to be available on rig floor.
8. Operating controls located a safe distance from the rig floor.
9. Hole must be kept filled on trips below intermediate casing.
10. D. P. float must be installed and used below zone of first gas intrusion.

78-50-6704
604-25-86
78-50-6704

Integration Project 10-32-72

RECEIVED

DEC 27 1985

NOTES

WRS COMPLETION REPORT

REISSUES SEC 1 TWP 17S RGE 33E
 PI# 30-T-0007 09/22/86 30-025-29569-0000 PAGE 1

NMEX LEA * 1650FSL 990FEL SEC NE SE
 STATE COUNTY FOOTAGE SPOT
 YATES PET D WSD
 OPERATOR WELL CLASS INIT FIN
 1 HOOVER "ADR" STATE
 WELL NO. LEASE NAME
 4155KB 413GR SANMAL
 OPER ELEV FIELD POOL AREA
 API 30-025-29569-0000
 LEASE TYPE NO. PERMIT OR WELL I.D. NO.
 12/31/1985 04/10/1986 ROTARY OIL
 SPUD DATE COMP. DATE TYPE TOOL STATUS
 11800 QUEEN MORANCO 2 RIG SUB 15
 PROJ. DEPTH PROJ. FORM CONTRACTOR
 DTD 11825 PB 4352 FM/TD SEAMAN
 DRILLERS T.D. LOG T.D. PLUG BACK TO OLD T.D. FORM T.D.

LOCATION DESCRIPTION

8 MI E MALJAMAR, NM

WELL IDENTIFICATION/CHANGES

FIELD CHGD FROM LEA CO UNDESIGNATED
 ZONE CHGD FROM WOLFCAMP
 FINAL CLASS CHGD FROM DO

CASING/LINER DATA

CSG 20	@ 38			01
CSG 13 3/8	@ 448 W/	425 SACKS		02
CSG 8 5/8	@ 4530 W/	1725 SACKS		03

TUBING DATA

TBG 2 3/8 AT 3698

INITIAL POTENTIAL

IPP 48BOPD 496BW 24HRS
 QUEEN PERF W/ 14/IT 3767- 3774 GROSS 006
 PERF 3767- 3774
 ACID 3767- 3774 2000GALS
 7 1/2%
 GTY 36.4 GOR TSTM

CONTINUED IC# 300257064085

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 Prohibited



Petroleum Information
 CORPORATION

PI-WRS-GE1
 Form No 18

IPANM EXHIBIT 40

REISSUES
PI# 30-T-0007 09/22/86 SEC 1 TWP 17S RGE 33E
30-025-29569-0000 PAGE 2

YATES PET
1 HOOVER "ADR" STATE D WSD

TYPE	FORMATION	LTH	TOP	DEPTH/SUB	BSE	DEPTH/SUB
LOG	RUSTLER		1534	2621		
LOG	SALT		1780	2375		
LOG	TANSILL		2630	1525		
LOG	YATES		2788	1367		
LOG	QUEEN		3755	400		
LOG	SN ANDRS		4563	-408		
LOG	GLORIETA		5993	-1838		
LOG	TUBB		7330	-3175		
LOG	ABO		8090	-3935		
LOG	WFCMP LM		9778	-5623		
LOG	KEMNITZ		10860	-6705		
LOG	SEAMAN		11568	-7413		

FORMATION TEST DATA

DST 1 - 004
NO OTHER DETAILS (TITE)
DST 2 - 005
NO OTHER DETAILS (TITE)

LOGS AND SURVEYS /INTERVAL,TYPE/

LOGS CNL FDC DLL

DRILLING PROGRESS DETAILS

YATES PET
207 S 4TH
ARTESIA, NM 88210
505-746-3558
12/30 LOC/1985/
01/08 DRLG 2970
01/08 SPUD 1/5/86 W/RT
01/15 4530 TD, RNG LOGS
01/22 DRLG 6320
01/28 DRLG 9115 (TITE HOLE)
02/04 DRLG 11008 (TITE HOLE)
02/12 DRLG 11619 (TITE HOLE)
02/18 11825 TD, MORT
02/26 11825 TD, (TITE HOLE)
03/27 11825 TD (TITE HOLE)

CONTINUED

IPANM EXHIBIT 40

REISSUES
PI# 30-T-0007 09/22/86 SEC 1 TWP 17S RGE 33E
30-025-29569-0000 PAGE 3

D WSD

YATES PET
1 HOOVER "ADR" STATE

DRILLING PROGRESS DETAILS

05/27 LOG TOP LOCAL CALL: XX MARKER 10155
TD REACHED 02/15/86 RIG REL 02/15/86
11825 TD, PB 4352
05/27 COMP 4/10/86, IPP 48 BO, 496 BWPD.
GTY 36.4, GOR TSTM
PROD ZONE - QUEEN 3767-3774
NO CORES, TWO DSTS (TITE) RPTD
09/15 QUEEN SHALLOWER POOL DISCOVERY IN THE
SANMAL FIELD
CT WILL BE REISSUED WHEN ADDITIONAL DATA
IS AVAILABLE
09/15 REISSUED TO CORRECT FIELD, ZONE, FINAL
CLASS & ADD DISC STMT
REPLACEMENT FOR CT ISSUED 6/2/86

Submit 3 copies to Appropriate District Office

DISTRICT I

1625 N. French Dr., Hobbs NM 88240

DISTRICT II

1301 W. Grand Avenue, Artesia NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec NM 87410

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87504-2088

Form C-103

Revised March 25, 1999

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-29569
1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ SWD		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator Yates Petroleum Corporation		6. State Oil & Gas Lease No. LG-3345
3. Address of Operator 105 South 4th Str., Artesia, NM 88210		7. Lease Name or Unit Agreement Name Hoover ADR State <12376>
4. Well Location Unit Letter <u>I</u> : <u>1650</u> feet from the <u>South</u> line and <u>990</u> feet from the <u>East</u> line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM County <u>Lea</u>		8. Well No. 1
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4139' GR		9. Pool Name or Wildcat SWD: Queen Vacuum: Wolfcamp, Northwest

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐
OTHER: Change Wellname ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: ☐

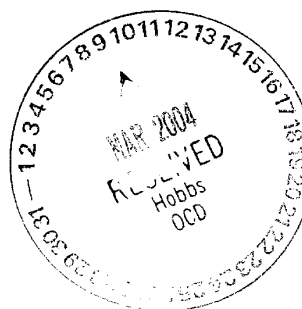
12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Yates Petroleum Corporation proposes to change wellname:

From: Sanmal Queen Unit 5

To: Hoover ADR State 1

OPER. OGRID NO. 25575
PROPERTY NO. 12376
POOL CODE _____
EFF. DATE _____
API NO. _____



I hereby certify that the information above is a true and complete to the best of my knowledge and belief.

SIGNATURE Stormi Davis TITLE Regulatory Compliance Technician DATE 3/8/04

Type or print name Stormi Davis Telephone No. 505-748-1471

(This space for State use)

APPROVED BY Harry W. Wink TITLE OC FIELD REPRESENTATIVE II/STAFF MANAGER DATE MAR 10 2004

Conditions of approval, if any:

Submit 3 copies to Appropriate District

Office

DISTRICT I

1625 N. French Dr., Hobbs NM 88240

DISTRICT II

1301 W. Grand Avenue, Artesia NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec NM 87410

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87504-2088

Form C-103

Revised March 25, 1999

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-29569
1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ <u>SWD</u>		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator Yates Petroleum Corporation		6. State Oil & Gas Lease No. LG-3345
3. Address of Operator 105 South 4th Str., Artesia, NM 88210		7. Lease Name or Unit Agreement Name Hoover ADR State
4. Well Location Unit Letter <u>I</u> : <u>1650</u> feet from the <u>South</u> line and <u>990</u> feet from the <u>East</u> line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM County <u>Lea</u>		8. Well No. <u>1</u>
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4139' GR		9. Pool Name or Wildcat <u>SWD: Queen</u> <u>Vacuum; Wolfcamp, Northwest</u>

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

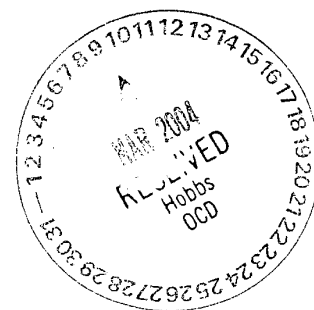
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐
 OTHER: Repair & convert to SWD ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
 CASING TEST AND CEMENT JOB ☐
 OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Yates Petroleum Corporation proposes to convert this well to salt water disposal.



Thereby certify that the information above is a true and complete to the best of my knowledge and belief.

SIGNATURE Stormi Davis TITLE Regulatory Compliance Technician DATE 3/8/04

Type or print name Stormi Davis Telephone No. 505-748-1471

(This space for State use) OC FIELD REPRESENTATIVE II

APPROVED BY Larry W. Wink DATE MAR 10 2004

Conditions of approval, if any:

IPANM EXHIBIT 40

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 1301 W. Grand Ave., Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 May 27, 2004

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ INJECTION 2. Name of Operator Yates Petroleum Corporation 3. Address of Operator 105 S. 4 th Street, Artesia, NM 88210 4. Well Location Unit Letter <u>I</u> : <u>1.650'</u> feet from the <u>South</u> line and <u>990'</u> feet from the <u>East</u> line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM <u>Lea</u> County 11. Elevation (Show whether DR, RKB, RT, GR, etc.) Pit or Below-grade Tank Application ☐ or Closure ☐ Pit type <u> </u> Depth to Groundwater <u> </u> Distance from nearest fresh water well <u> </u> Distance from nearest surface water <u>N/A</u> Pit Liner Thickness: <u> </u> mil Below-Grade Tank: Volume <u> </u> bbls; Construction Material <u> </u>		WELL API NO. 30-025-29569 5. Indicate Type of Lease STATE ☒ FEE ☐ 6. State Oil & Gas Lease No. 7. Lease Name or Unit Agreement Name SANMAL QUEEN UNIT 8. Well Number #5 9. OGRID Number 025575 10. Pool name or Wildcat SANMAL QUEEN
--	--	---

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☒ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ OTHER: ☐	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: ☐
---	---

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Yates Petroleum Corporation respectfully requests permission to Temporarily Abandon this well. The lease is included in a sale package. The potential buyer may want to re-activate.

Contact NMOCD 24 hours prior to performing Mechanical Integrity Test.

1. MIRU a completion unit. Release pkr & TOH w/ tbg & pkr.
2. RU WL. RIH w/ CIBP & set at 3,750'. Dump 35' cement on CIBP.
3. TIH w/ tbg. Circulate hole w/ inhibited fluid.
4. Test casing to 500 psi for 30 minutes. Record Results.
5. TOH w/ tbg, LD.
6. Clean up location & release equipment.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Su'Ann Rogers TITLE Regulatory Compliance Technician DATE 1/17/05

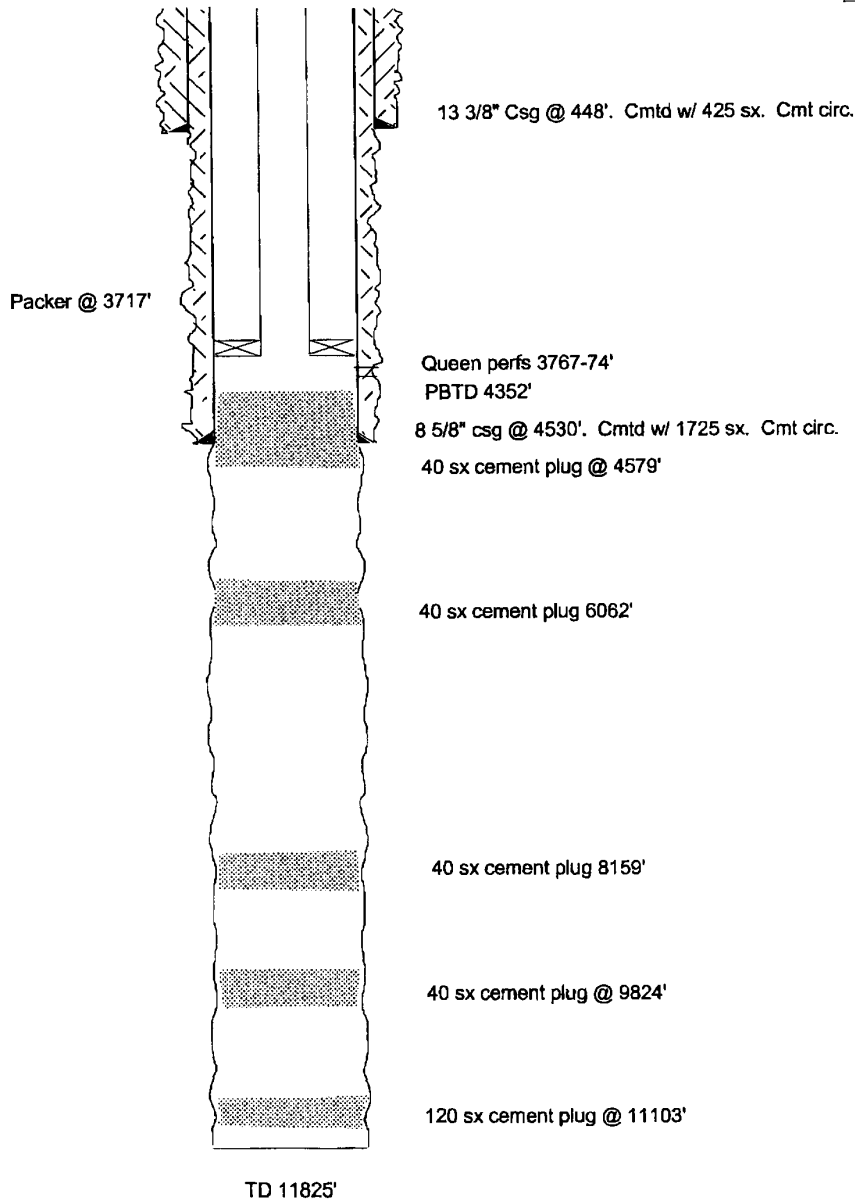
Type or print name Su'Ann Rogers E-mail address: Telephone No. 505-748-1471
For State Use Only FIELD REPRESENTATIVE II/STAFF MANAGER

APPROVED BY: Gay W. Wink TITLE DATE JAN 21 2005
 Conditions of Approval (if any):

IPANM EXHIBIT 40

Well Name: Hoover ADR State No. 1 Field: Sanmat
 Location: 1650' FSL & 990' FEL Sec. 1-17S-33E Lea Co, NM
 GL: 4139' Zero: AGL: KB: 4156.6'
 Spud Date: Completion Date:
 Comments: Well originally drilled as Hoover ADR State No. 1. Plugged back and
re-named Sanmat Queen Unit No. 5

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 61 & 54.5# J55	448'
8 5/8" 32 & 24# J55	4530'



CURRENT CONFIGURATION

SKETCH NOT TO SCALE

DATE: 2/23/04

IPANM 002237

IPANM EXHIBIT 40

Well Name: Hoover ADR State No. 1 Field: Sanmal

Location: 1650' FSL & 990' FEL Sec. 1-17S-33E Lea Co, NM

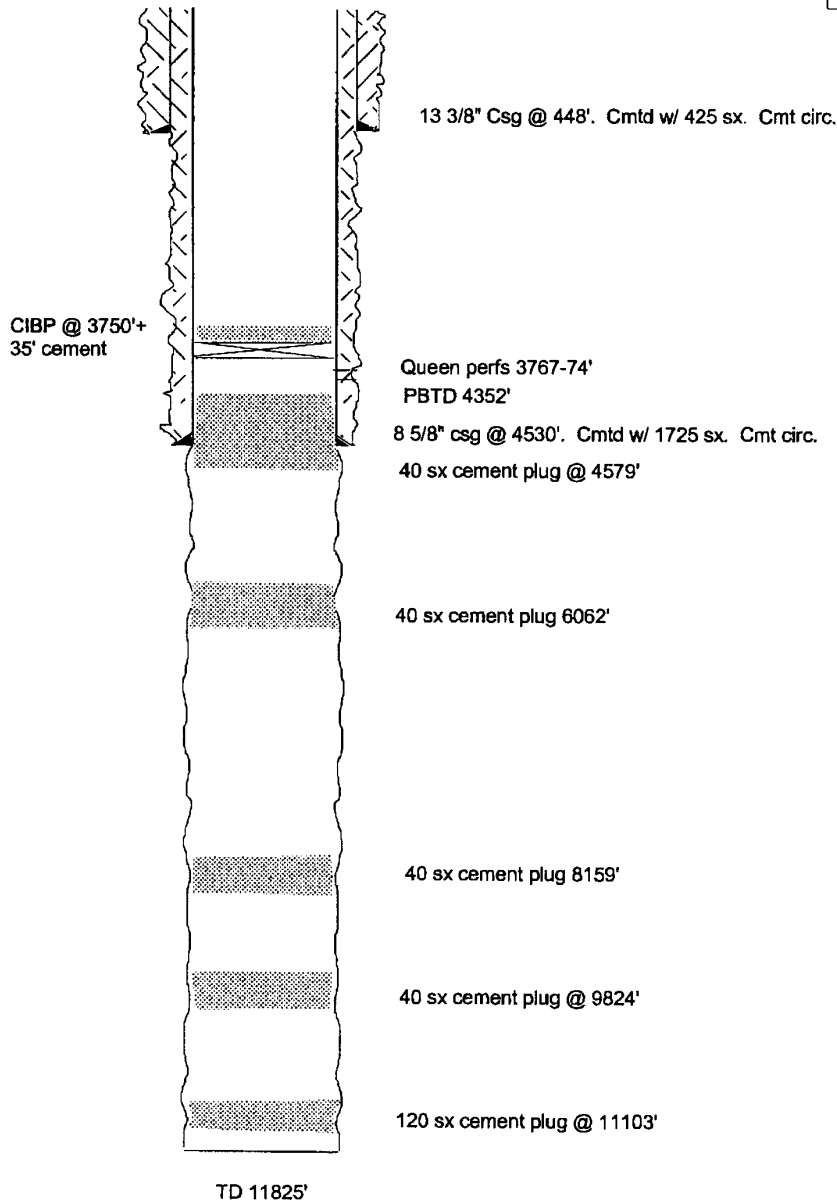
GL: 4139' Zero: AGL: KB: 4156.6'

Spud Date: Completion Date:

Comments: Well originally drilled as Hoover ADR State No. 1. Plugged back and re-named Sanmal Queen Unit No. 5

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 61 & 54.5# J55	448'
8 5/8" 32 & 24# J55	4530'

PROPOSED CONFIGURATION



SKETCH NOT TO SCALE

DATE: 2/23/04

IPANM 002238

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 1301 W. Grand Ave., Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 May 27, 2004

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ <u>Injection Well</u>		WELL API NO. 30-025-29569
2. Name of Operator Yates Petroleum Corporation		5. Indicate Type of Lease STATE ☒ FEE ☐
3. Address of Operator 105 S. 4 th Street, Artesia, NM 88210		6. State Oil & Gas Lease No. LG-3345
4. Well Location Unit Letter <u>I</u> : <u>1650</u> feet from the <u>South</u> line and <u>990</u> feet from the <u>East</u> line Section <u>1</u> Township <u>17S</u> Range <u>33E</u> NMPM <u>Lea</u> County		7. Lease Name or Unit Agreement Name Sanmal Queen Unit
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4139' GR		8. Well Number 5
Pit or Below-grade Tank Application ☐ or Closure ☐ Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		9. OGRID Number 025575
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data		10. Pool name or Wildcat Vacuum; Wolfcamp, Northwest

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ OTHER: ☐	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P & A ☐ CASING/CEMENT JOB ☐ OTHER: Returned to Injection/Change Wellname ☒
--	--

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

2-6-05 Pressured up on backside to 500#. Called Bill Pritchard w/NMOCD. Rigged up chart. Test backside to 570#. Tested good. Bill Pritchard took chart to Hobbs office.

2-28-05 Well turned back to active water injection status.

Wellname will now be Sanmal Queen Unit #5. (Formerly Hoover ADR State #1)

OC
 Hobbs
 RECEIVED
 MAR 15 2005

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Stormi Davis TITLE Regulatory Compliance Technician DATE 3-9-05

Type or print name Stormi Davis E-mail address: stormid@ypcnm.com Telephone No. 505-748-1471

For State Use Only

APPROVED BY: Harry W. Wank TITLE OC FIELD REPRESENTATIVE II/STAFF MANAGER DATE MAR 15 2005
 Conditions of Approval (if any):

Well Name: SANMAL QUEEN UNIT		No. 005	Conducted by: OCD	Operator
API Well No: 30-025-29569-00-00		Test Date & Time: 02/07/05 11:48	Test History for this Well - Click on Date to Open Record >>>	Refresh 2/7/2005 11:48:46 A 10/14/2004 9:50:49 A 10/8/2003 4:10:28 P 10/30/2002 9:53:15 A
Pool No: SANMAL;QUEEN		Dt Mod: 2/7/2005		

Standard Pressure Test Detail Able to Test? Adequate Initial Test Press: 570 psig Final Test Press: 570 psig Test Duration: 30 min.	Reason For Test Operator Reported Test Used for IMIT Std. Annulus Pres. Test Arrival Status: Static MIT Result: Acceptable Witnessed? Yes Name: Billy Prichard	Permitted and Witnessed Pressures Permit psi: 950 Inject psi: Galen said inj prs at 600psi N o t e s
--	--	---

Simultaneous	Bradenhead Detail Section	Failed? ☐
SURF Press: 0	SURF Comment: 	
INT 1 Press: 0	INT 1 Comment: N/A	
INT 2 Press: 0	INT 2 Comment: N/A	
PROD Press: 0	PROD Comment: 	
TBG Press: 0	TBG Comment: Open during tst	

Operator: YATES PETROLEUM CORPORATION	Well Location: T 1 17 S 33 E	County: Lea
--	-------------------------------------	--------------------

Go to Incidents/Spills		Well Inspections		Date Mod 02/07/2005	
API Well No.	30-025-29569-00-00	Owner	YATES PETROLEUM CORPORATION	County	Lea
Well Name	SANMAL QUEEN UNIT	Number	005	Inspect No.	IBEP0503842441
Well Type	Injection - (All Ty	UL STR	1 - 1 - 17S - 33E	Status	Active
		Fac/Pro			NA
Directions					
Purpose	Compliance Issues				
Normal Routine Activity	Violation Identified?	☐	Current Type	I	Status: A
Type	Significant NC?	☐	Respondant	Change ONGARD to...	
Pressure Test	Well Idle > 1 Year?	☐	25575		
Notification Type	Go to Compliance				
Date Performe	2/7/2005				
Date NOV					
Date Extension					
Date Passed					
Comply #	Incident No. Inspector Billy Prichard Duration				
Generate Inspection Reports from [REPORTS] / [INSP]					

Galen called to witness pres test. PSA 3717ft. Pres annulus to 570 psi for 30 minutes OK. Well to go back in service???

Failed Items

1529
3532Form C-103
May 27, 2004

Submit 3 Copies To Appropriate District Office
District I
 1625 N. French Dr., Hobbs, NM 88240
District II
 1301 W. Grand Ave., Artesia, NM 88210
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO.

30-025-29569

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

LG-3345

7. Lease Name or Unit Agreement Name

Sanmal Queen Unit

8. Well Number

5

9. OGRID Number

025575

10. Pool name or Wildcat

Vacuum; Wolfcamp, Northwest

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ Injection Well

2. Name of Operator

Yates Petroleum Corporation

3. Address of Operator

105 S. 4th Street, Artesia, NM 88210

4. Well Location

Unit Letter I : 1650 feet from the South line and 990 feet from the East line
 Section 1 Township 17S Range 33E NMPM Lea County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
4139' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P & A ☐
 CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Propose to Plug & Abandon as Follows:

- 1) MIRU plugging company. Release packer and TOH w/tubing and packer.
 - 2) RU WL. Set CIBP @ 3750'. Dump 35' cement on CIBP.
 - 3) TIH w/tubing. Circulate hole w/mud. PUH and spot 100' cement plug 498-398'. WOC and tag.
 - 4) Spot 10 sx plug @ surface.
 - 5) Install marker and clean location.
- SPOT 100' PLUG F/2600-2500' BASE OF SALT*
(Proposed schematic attached.)
SPOT 100' PLUG F/1570-1570' TOP OF SALT
- THE OIL CONSERVATION DIVISION
 RECEIVED 24 HOURS PRIOR
 BEGINNING OF PLUGGING OPERATIONS

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Stormi Davis TITLE Regulatory Compliance Technician DATE 2-14-07Type or print name Stormi Davis E-mail address: stormid@ypcnm.com Telephone No. 505-748-1471

For State Use Only

APPROVED BY: Gay W. Wink TITLE _____ DATE _____

Conditions of Approval (if any):

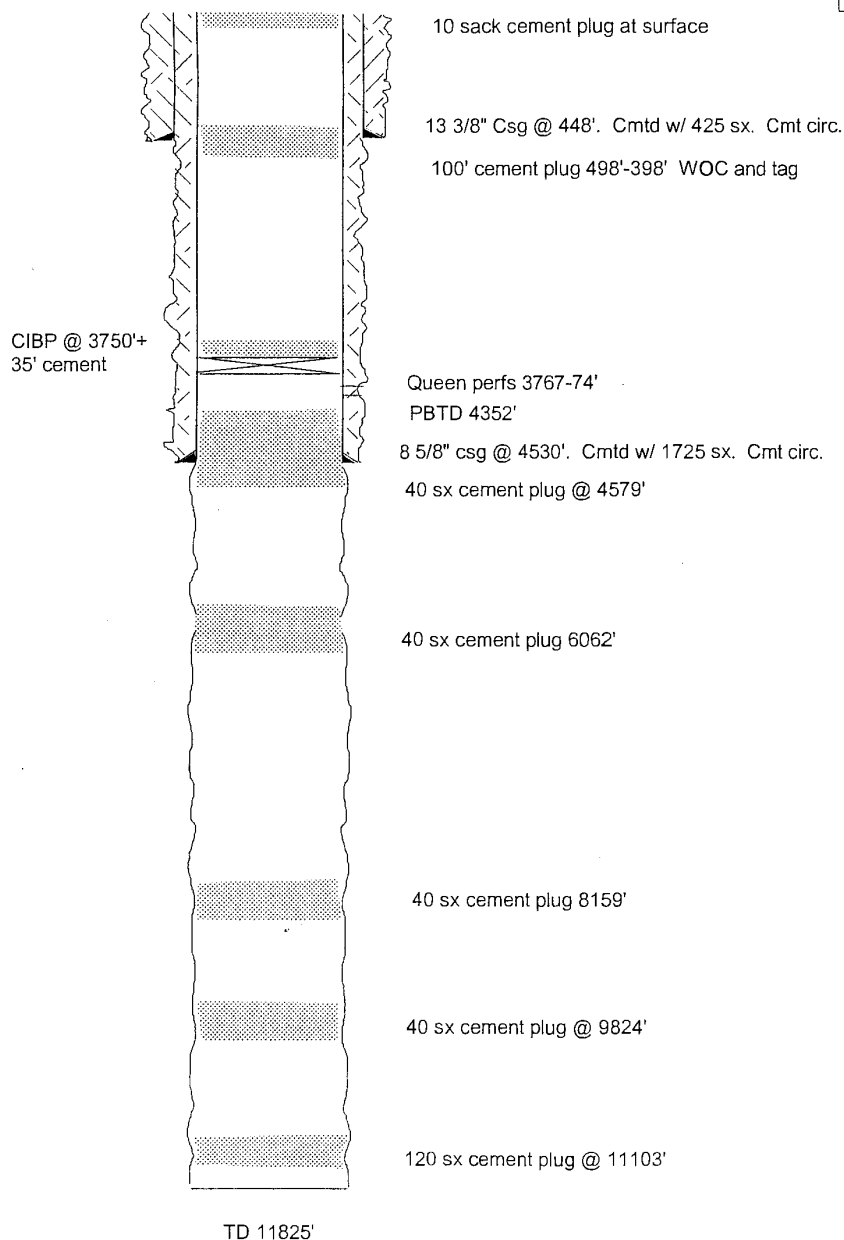
OCD FIELD REPRESENTATIVE II/STAFF MANAGER

MAR 06 2007

IPANM EXHIBIT 40

Well Name: Hoover ADR State No. 1 Field: Sanmal
 Location: 1650' FSL & 990' FEL Sec. 1-17S-33E Lea Co, NM
 GL: 4139' Zero: AGL: KB: 4156.6'
 Spud Date: Completion Date:
 Comments: Well originally drilled as Hoover ADR State No. 1. Plugged back and
re-named Sanmal Queen Unit No. 5

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 61 & 54.5# J55	448'
8 5/8" 32 & 24# J55	4530'



PROPOSED CONFIGURATION

SKETCH NOT TO SCALE

DATE: 2/13/07 HOOVR1B

IPANM 002243

C, J4AReport

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-145
Permit 58253



Change of Operator

Previous Operator Information

OGRID: 25575
Name: YATES PETROLEUM CORPORATION
Address: 105 S 4TH ST
Address: _____
City, State, Zip: ARTESIA, NM 88210

New Operator Information

Effective Date: 7/1/2007
OGRID: 20989
Name: SMITH & MARRS INC
Address: PO BOX 863
Address: _____
City, State, Zip: KERMIT, TX 79745

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Previous Operator

Signature: *Randy G. Patterson*
Printed Name: Randy G. Patterson
Title: Vice President of Exploration and Production
Date: 8/8/07 Phone: 505-748-1471

New Operator

Signature: *Terri Jennings*
Printed Name: Terri Jennings
Title: Agent
Date: 8-2-2007 Phone: 432-586-3076

NMOCD Approval

Electronic Signature: Paul Kautz, District 1
Date: August 08, 2007

<http://www.emnrd.state.nm.us/OCD/OCDPermitting/Report/C104A/C104AReport.aspx?Per...> 8/2/2007

ChangeOp Comments

OGRID: [25575] YATES PETROLEUM CORPORATION
Permit Number: 58253
Permit Type: ChangeOp

Created By	Comment	Comment Date
JJENNINGS	Will fax copy of C-145 to Hobbs District and mail original signature.	8/2/2007
DPHILLIPS	Gail Macquesten confirmed that the additioanl bonding does apply for the wells not producing. Please go to View Forms button and you can see which wells and the amounts. I cannot approve the change until bonding is received. Questions? Call me 505-476-3461.	8/3/2007

Submit 3 Copies To Appropriate District

State of New Mexico

Form C-103

May 27, 2004

Office

Energy, Minerals and Natural Resources

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S St Francis Dr., Santa Fe, NM 87505

RECEIVED

OIL CONSERVATION DIVISION

APR 17 2009

HOBBSOCD

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)		WELL API NO. / 30-025-29569
1. Type of Well: Oil Well ☐ Gas Well ☐ Other INJECTION		5. Indicate Type of Lease FEDERAL STATE ☒ FEE ☐
2. Name of Operator SMITH & MARRS, INC.		6. State Oil & Gas Lease No. LG-3345
3. Address of Operator P.O. BOX 863 KERMIT, TX 79745		7. Lease Name or Unit Agreement Name SANMAL QUEEN UNIT
4. Well Location Unit Letter I : 1650 feet from the SOUTH line and 990 feet from the EAST line Section 1 Township 17S Range 32E NMPM County LEA, NM		8. Well Number 005
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4139' GR		9. OGRID Number 020989
Pit or Below-grade Tank Application ☐ or Closure ☐		10. Pool name or Wildcat <i>Sanmal, Queen's</i> VACUUM; WOLF CAMP, NORTHWEST
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

- 1) MIRU plugging company. Release packer and TOH w/tubing and packer.
- 2) RU WL. Set CIBP @ 3750'. Dump 35' cement on CIBP.
- 3) Spot 100' plug f/2600'-2500'-Base of Salt
- 4) Spot 100' plug f/1670' -1570'-Top of Salt
- 5) TIH w/tubing. Circulate hole w/mud. PUH and spot 100' cement plug 498-398'. WOC and tag.
- 6) Spot 10 sxs plug @ surface.
- 7) Install marker and clean location.

The Oil Conservation Division **Must be notified**
24 hours prior to the beginning of plugging operations

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE *Mark O. Hobbs* TITLE AGENT DATE 3-25-09

Type or print name

E-mail address:

Telephone No.

For State Use Only

APPROVED BY: *[Signature]* TITLE PETROLEUM ENGINEER DATE APR 17 2009

Conditions of Approval (if any):

IPANM EXHIBIT 40

Well Name: Hoover ADR State No. 1 Field: Sanmal

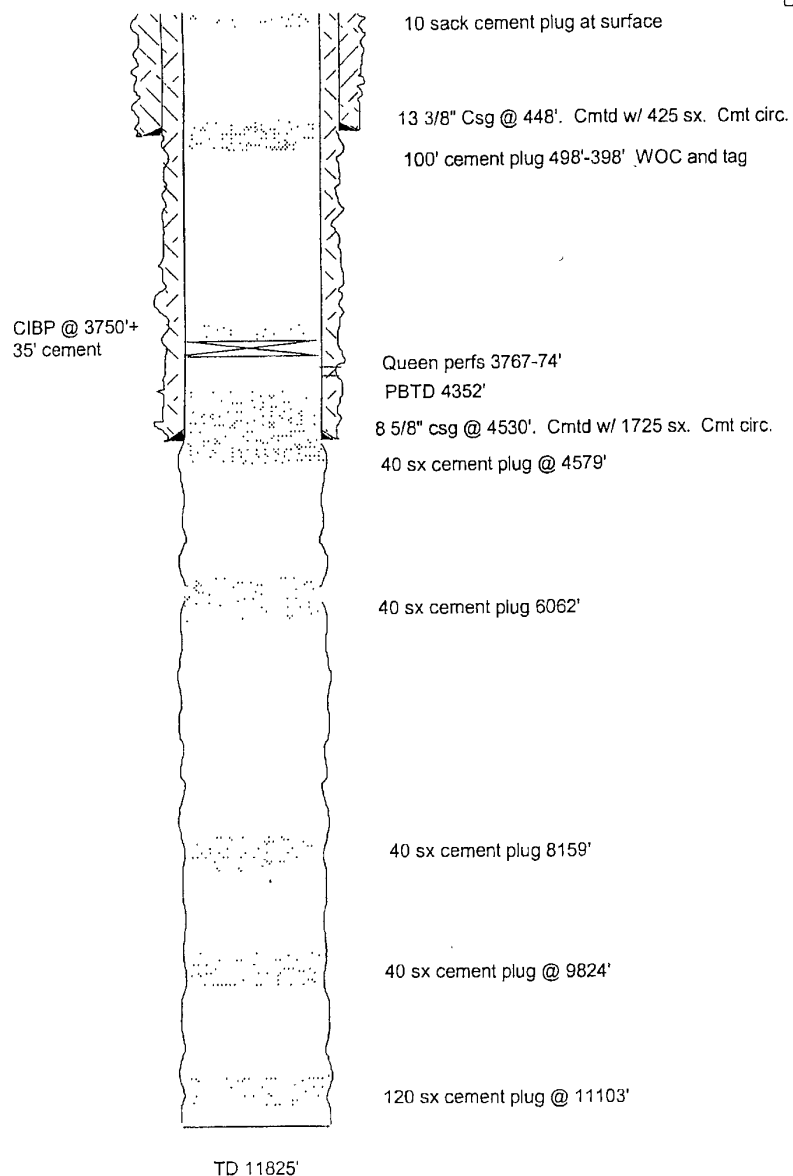
Location: 1650' FSL & 990' FEL Sec. 1-17S-33E Lea Co, NM

GL: 4139' Zero: AGL: KB: 4156.6'

Spud Date: Completion Date:

Comments: Well originally drilled as Hoover ADR State No. 1. Plugged back and re-named Sanmal Queen Unit No. 5

Casing Program	
Size/Wt/Grade/Conn	Depth Set
13 3/8" 61 & 54.5# J55	448'
8 5/8" 32 & 24# J55	4530'



PROPOSED CONFIGURATION

SKETCH NOT TO SCALE

3/25/09
DATE: ~~3/13/07~~ ~~HOOPER~~

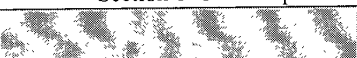
IPANM 002247

IPANM EXHIBIT 40

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. <u>30-025-29569</u> ✓ 5. Indicate Type of Lease: FEDERAL ☒ STATE ☒ FEE ☐ 6. State Oil & Gas Lease No. <u>LG-3345</u> 7. Lease Name or Unit Agreement Name <u>SANMAL QUEEN UNIT</u> ✓ 8. Well Number <u>005</u> ✓ 9. OGRID Number <u>020989</u> 10. Pool name or Wildcat <u>Sanmal, Qn</u> VACUUM; WOLF CAMP, NORTHWEST
1. Type of Well: Oil Well ☐ Gas Well ☒ Other <u>INJECTION</u> 2. Name of Operator <u>SMITH & MARRS, INC.</u> ✓ 3. Address of Operator <u>P.O. BOX 863 KERMIT, TX 79745</u>		
4. Well Location Unit Letter <u>I</u> : <u>1650</u> feet from the <u>SOUTH</u> line and <u>990</u> feet from the <u>EAST</u> line Section <u>1</u> Township <u>17S</u> Range <u>32E</u> NMPM County <u>LEA</u> , NM		
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 		
Pit or Below-grade Tank Application ☐ or Closure ☐ Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ OTHER: ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☒ CASING/CEMENT JOB ☐ OTHER: ☐	
--	--	--	--

13. Describe prop osed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Hole in casing @ 560'
Pump 290 sx @ 560' – would not hold

Circulate plugging mud

4/2/09 set cibp @ 3750'
4/16/09 spot 30 sx @ 3750' – spot 40 sx @ 2614' – spot 40 sx @ 1670' tag @ 1516'
4/17/09 spot 70 sx @ 1516' tag @ 300' – spot 15 sx @ 63' to surface

Install PA marker, cut off anchors, clean up location move out

Steel pits were used on this plugging procedure

RECEIVED
MAY 13 2009
HOBBSDOCD

Approved for plugging of well bore only.
Liability under bond is retained pending receipt of C-103 (Subsequent Report of Well Plugging) which may be found at OCD Web Page under FORMS, www.emnrd.state.nm.us/oed.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Mark Hall TITLE AGENT DATE 4-24-09

Type or print name For State Use Only E-mail address: _____ Telephone No. _____

APPROVED BY: Cathy W. Hill TITLE DISTRICT 1 SUPERVISOR DATE MAY 14 2009
Conditions of Approval (if any) _____

IPANM 002248

P/A'D. OK TO RELEASE

DATE: 9/22/09COMPANY: SMITH & MARRSLEASE NAME and #: SANMAL QUEEN # 5API# 3002529569UL I SECTION 1 TOWNSHIP 17S RANGE 33ESIGNED: 

RECEIVED

RECEIVED

OCT 13 2009

Form C-103

March 18, 2009

Submit One Copy To Appropriate District Office

Office

District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S St Francis Dr., Santa Fe, NM

87505

State of New Mexico

Energy, Minerals and Natural Resources

NMOCD ARTESIA

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-025-29569

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

LG 3345

7. Lease Name or Unit Agreement Name

SANMAL QUEEN UNIT # 5

8. Well Number 5

9. OGRID Number

020989

10. Pool name or Wildcat

SANMAL QUEEN

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

SMITH AND MARRS, INC

3. Address of Operator

PO BOX 863 KERMIT, TX 79745

4. Well Location

Unit Letter I: 1650 feet from the S line and 990 feet from the E line

Section 1 Township 17S Range 33E NMPM LEA County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐ CHANGE PLANS ☐PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER:

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐ P AND A ☐CASING/CEMENT JOB ☐☒ Location is ready for OCD inspection after P&A

- ☒ All pits have been remediated in compliance with OCD rules and the terms of the Operator's pit permit and closure plan.
- ☒ Rat hole and cellar have been filled and leveled. Cathodic protection holes have been properly abandoned.
- ☒ A steel marker at least 4" in diameter and at least 4' above ground level has been set in concrete. It shows the

OPERATOR NAME, LEASE NAME, WELL NUMBER, API NUMBER, QUARTER/QUARTER LOCATION OR UNIT LETTER, SECTION, TOWNSHIP, AND RANGE. ALL INFORMATION HAS BEEN WELDED OR PERMANENTLY STAMPED ON THE MARKER'S SURFACE.

- ☒ The location has been leveled as nearly as possible to original ground contour and has been cleared of all junk, trash, flow lines and other production equipment.
- ☒ Anchors, dead men, tie downs and risers have been cut off at least two feet below ground level.
- ☒ If this is a one-well lease or last remaining well on lease, the battery and pit location(s) have been remediated in compliance with OCD rules and the terms of the Operator's pit permit and closure plan. All flow lines, production equipment and junk have been removed from lease and well location.
- ☒ All metal bolts and other materials have been removed. Portable bases have been removed. (Poured onsite concrete bases do not have to be removed.)
- ☒ All other environmental concerns have been addressed as per OCD rules.
- ☒ Pipelines and flow lines have been abandoned in accordance with 19.15.35.10 NMAC. All fluids have been removed from non-retrieved flow lines and pipelines.

When all work has been completed, return this form to the appropriate District office to schedule an inspection.

SIGNATURE Mark Hoskins TITLE _____ VP _____ DATE 10/8/09

TYPE OR PRINT NAME MARK HOSKINS E-MAIL: _____ PHONE: 432-586-2844

For State Use Only

APPROVED BY: Mark Hoskins TITLE Compliance Officer DATE 10/20/2009

Conditions of Approval (if any)

IPANM EXHIBIT 41

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Name of Company <u>Smith + Marrs Inc.</u>		Contact <u>Amanda Taylor</u>	☒ Initial Report ☐ Final Report
Address <u>PO Box 863 Hermit TX 79745</u>		Telephone No. <u>432-586-3076</u>	
Facility Name <u>Santal Queen Unit</u>		Facility Type <u>Battery</u>	
Surface Owner <u>State of NM</u>	Mineral Owner <u>Smith + Marrs</u>	API No. <u>30-025-09948</u>	<u>LG3345</u>

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<u>I</u>	<u>1</u>	<u>17S</u>	<u>33E</u>					<u>LeA</u>

Latitude 32.861075 Longitude -103.61162

NATURE OF RELEASE

Type of Release <u>produced water</u>	Volume of Release <u>UNKNOWN</u>	Volume Recovered <u>UNKNOWN</u>
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NO

RECEIVED

By Olivia Yu at 3:59 pm, Mar 21, 2017

Describe Cause of Problem and Remedial Action Taken.*

Water Line plug - remove all contaminated soil.
Soil samples

Describe Area Affected and Cleanup Action Taken.*

Inside Containment of tank battery for #6-#7
will remediate as needed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>Amanda Taylor</u>	OIL CONSERVATION DIVISION	
Printed Name: <u>Amanda Taylor</u>	Approved by Environmental Specialist:	
Title: <u>office manager</u>	Approval Date: <u>3/21/2017</u>	Expiration Date:
E-mail Address: <u>taylorataylor16@aol.com</u>	Conditions of Approval:	Attached ☐
Date: <u>3-5-17</u> Phone: <u>432-586-3076</u>	<u>see attached</u>	

* Attach Additional Sheets If Necessary

1RP-4647

fOY1708059033

✓

nOY1708059305

pOY1708060012

Scanned by CamScanner

IPANM 002251

IPANM EXHIBIT 41

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/15/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-4647__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 4/21/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

IPANM EXHIBIT 41

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

IPANM EXHIBIT 41

From: Groves, Amber
To: [Yu, Olivia, EMNRD](#); [Amanda Taylor](#)
Subject: RE: SWD 142/LG-3345
Date: Wednesday, October 25, 2017 5:06:00 PM
Attachments: image003.png
image005.png
image006.png
image001.png

Amanda,

What is the status of the work plan submittal? I am in need of an update as the last communication that I have is the below e-mail sent on 7/21/2017.

Thank you,

Amber Groves

Remediation Specialist
Field Operations Division
(575)392-3697
(575)263-3209 cell
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88240

.....
CONFIDENTIALITY NOTICE - This e-mail transmission, including all documents, files, or previous e-mail messages attached hereto, may contain confidential and/or legally privileged information. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that you must not read this transmission and that any disclosure, copying, printing, distribution, or use of any of the information contained in and/or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender and delete the original transmission and its attachments without reading or saving in any manner. Thank you.

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Friday, July 21, 2017 8:04 AM
To: Amanda Taylor <taylortaylor16@aol.com>
Cc: Groves, Amber <agroves@slo.state.nm.us>
Subject: RE: SWD 142/LG-3345

Good morning Amanda:

The below information should provide some guidance. At a minimum, please include these items to facilitate review of the delineation/corrective action plan:

1. Scaled, preferably digital, map of the site with location of release, locations of proposed or actual sample points, and dimensions of the release demarcated. You can either mark on the map or provide a table on a subsequent page of sample points and respective GPS coordinates.
2. Documentation of depth to groundwater search. Go to <http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html>
 - Use the UTM NAD83 radius search with a radius of 2000 m and 5000 m.
 - To get GPS coordinates in latitude/longitude degrees into UTM coordinates, use the UTM converter (<http://nmwrrs.ose.state.nm.us/nmwrrs/utmLocTool.html>)
 - Output the report in pdf format.
 - Check the Chevron Trend Map for Lea County and/or USGS database.
 - Use the conservative value from all sources to determine average water table depth.
3. Check on a topographical map and report distance to surface water body and water source.
4. Tabulate any preliminary field and laboratory data for Benzene, BTEX, TPH, and chlorides with sample IDs and depth of samples. Provide the laboratory documentation and chain of command at the back or in an appendix.
5. Georeferenced photos in tiff, jpg, jpeg etc. format, if available. Provide photos that were taken of the release area and cleanup/delineation activities. Photos for the remediation plan ideally would be taken at the same

IPANM 002254

IPANM EXHIBIT 41

spots/direction as the delineation stage.

6. Attach a copy of the reviewed initial C141.
7. Any releases on State leases (such as this one) will need to have a revegetation plan. Like approval from Amber Groves (State Land Office) will be required.

Let me know if you have questions.

Olivia

From: Amanda Taylor [<mailto:taylortaylor16@aol.com>]
Sent: Monday, July 17, 2017 12:06 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Subject: Re: SWD 142/LG-3345

Good afternoon,

Could you please call me at your earliest convenience? I think I have everything ready to send over, I just have a few questions. Thank you and have a great day!

Amanda Taylor

Smith & Marrs, Inc.
PO Box 863
Kermit, Tx 79745
432-586-3076
Cell# 432-940-4948
taylortaylor16@aol.com

-----Original Message-----

From: Yu, Olivia, EMNRD, EMNRD <Olivia.Yu@state.nm.us>
To: Amanda Taylor <taylortaylor16@aol.com>; agroves <agroves@slo.state.nm.us>
Cc: seay04 <seay04@leaco.net>
Sent: Tue, Jun 27, 2017 11:40 am
Subject: RE: SWD 142/LG-3345

Good morning Ms. Taylor:

Mr. Seay met with Amber Groves and I this morning about the delineation process thus far for 1RP-4647. In order for a full assessment and subsequent steps, please send the laboratory analyses in an electronic format as well as the other corrective action requirements, such as documentation of depth to groundwater using the NMOSE database or distance to surface waterbodies and water sources. If you have questions/require clarification about what to include in a report, please contact me.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Yu, Olivia, EMNRD
Sent: Tuesday, March 21, 2017 4:56 PM

IPANM 002255

IPANM EXHIBIT 41

To: 'Amanda Taylor' <taylortaylor16@aol.com>; agroves@slo.state.nm.us

Subject: RE: SWD 142/LG-3345

Dear Ms. Taylor:

The RP for this incident is

4647	3/21/2017	A	Smith & Marrs	Sanmal Queen Unit battery		17S-33E-1I	3/21/2017
-------------	-----------	---	---------------	---------------------------	--	------------	-----------

Please note that a release characterization/delineation workplan as detailed in the attachment must be approved by NMOCD BEFORE any remediation work.

Also, what is the status of 1RP-2330 that occurred on the same location in October 20, 2009?

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Amanda Taylor [<mailto:taylortaylor16@aol.com>]

Sent: Wednesday, March 15, 2017 3:05 PM

To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; agroves@slo.state.nm.us

Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; agroves@slo.state.nm.us

Subject: Re: SWD 142/LG-3345

Here is the c141 on the Sanmal Queen Unit LG3345. Please let me know if you need anything more as of now from myself.

Have a great day!

Amanda Taylor

**Smith & Marrs, Inc.
P.O. Box 863
Kermit, TX 79745**

**Office: 432-586-3076
Cell: 432-940-4948
taylortaylor16@aol.com**

-----Original Message-----

From: Yu, Olivia, EMNRD, EMNRD <Olivia.Yu@state.nm.us>

To: Amanda Taylor <taylortaylor16@aol.com>

Cc: Oberding, Tomas, EMNRD, EMNRD <Tomas.Oberding@state.nm.us>; Groves, Amber <agroves@slo.state.nm.us>

Sent: Thu, Feb 23, 2017 11:04 am

Subject: RE: SWD 142/LG-3345

IPANM 002256

IPANM EXHIBIT 41

Ms. Taylor:

NMOCD and NMSLO require an update on the issues addressed below. Please provide the requested information ASAP.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Oberding, Tomas, EMNRD
Sent: Thursday, January 19, 2017 11:46 AM
To: Groves, Amber <agroves@slo.state.nm.us>; Amanda Taylor <taylortaylor16@aol.com>
Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Subject: RE: SWD 142/LG-3345

The OCD would like to confirm that we have no data regarding the site outside of the 2009 C-141.
This site appears out of compliance and a letter of non-compliance may be drafted as the spills evident in the photos appear-
Over 25bbbls
Older than 14 days
Please provide an appropriate C-141 to account for the new spills on site by Monday 1/23/2017.
A complete update as to all remedial activities regarding the 2009 (1RP-2330) spill is also required within 14 days.

-Dr. Oberding

Tomáš 'Doc' Oberding PhD
Hydrologist, Adv-District 1
Oil Conservation Division, EMNRD
(505) 476-3403
E-Mail: tomas.oberding@state.nm.us
一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Groves, Amber [<mailto:agroves@slo.state.nm.us>]
Sent: Thursday, January 19, 2017 9:43 AM
To: Amanda Taylor <taylortaylor16@aol.com>
Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: RE: SWD 142/LG-3345

From: Amanda Taylor [<mailto:taylortaylor16@aol.com>]
Sent: Thursday, January 19, 2017 9:17 AM
To: Groves, Amber <agroves@slo.state.nm.us>
Cc: Olivia.Yu@state.nm.us; Tomas.Oberding@state.nm.us
Subject: Re: SWD 142/LG-3345

IPANM EXHIBIT 41

Let me talk to the field and my supervisor and I will get back to you on this issue. Is there anyway you can send me the pictures in quested to send over to my supervisor?

Thanks

Amanda Taylor

**Smith & Marrs, Inc.
P.O. Box 863
Kermit, TX 79745**

**Office: 432-586-3076
Cell: 432-940-4948
taylortaylor16@aol.com**

-----Original Message-----

From: Groves, Amber <agroves@slo.state.nm.us>
To: taylortaylor16 <taylortaylor16@aol.com>
Cc: Yu, Olivia, EMNRD, EMNRD <Olivia.Yu@state.nm.us>; Oberding, Tomas, EMNRD, EMNRD <Tomas.Oberding@state.nm.us>
Sent: Thu, Jan 19, 2017 10:08 am
Subject: RE: SWD 142/LG-3345

Amanda,

I have been reviewing photographs from my lease inspection and there is also a large spoil pile located on the well pad of Unit #4. I would like to know what the circumstances are behind that and how long it has been there.

Thank you,



Amber Groves

*Remediation Specialist
Field Operations Division*
(575)392-3697
(575)263-3209 cell
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88260

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From: Groves, Amber
Sent: Thursday, January 19, 2017 8:46 AM
To: 'taylortaylor16@aol.com' <taylortaylor16@aol.com>

IPANM 002258

IPANM EXHIBIT 41

Cc: 'Yu, Olivia, EMNRD' <Olivia.Yu@state.nm.us>; 'Oberding, Tomas, EMNRD' <Tomas.Oberding@state.nm.us>
Subject: FW: SWD 142/LG-3345

Amanda,

I have a few issues associated with the above listed leases that I would like addressed. The Sanmal Queen Unit tank battery appears to have had numerous releases. There are two historical releases to the south of the perimeter fencing that appear to have come from flow lines. There is a rather large, visibly contaminated spoil pile in the middle of the location that looks as if it has been there for many months with no liner. There is also an open, visibly still impacted excavation on location as well as the tank battery facility being completely full of hydrocarbons and produced water. What we will need for this location is a C-141 submitted to myself as well as Olivia Yu and Tomas Oberding with NMOCDD. This site will need to be fully delineated as in all historic impacts, onsite excavation, underneath the spoil pile and within the battery berms. A work plan should follow once the site has been fully delineated. I have copied Olivia and Dr. Oberding on this e-mail for your convenience.

In addition, there is an open RP for this facility that does not seem to have any paperwork beyond the C-141 that needs to be followed up on. It is 1RP-2330. It has been open since 2009, so please advise on the remediation status.

Thank you and feel free to give me a call with any questions or if you would like to set up an onsite meeting.



Amber Groves

Remediation Specialist
Field Operations Division
(575)392-3697
(575)263-3209 cell
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88260

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IPANM EXHIBIT 41

From: [Yu, Olivia, EMNRD](#)
To: ["Rickey Smith"](#)
Cc: agroves@slo.state.nm.us; [Ernest Padilla](#); [Billings, Bradford, EMNRD](#)
Subject: RE: San Mal unit
Date: Wednesday, July 12, 2017 2:37:00 PM
Attachments: 1RP4647.pdf

Mr. Smith:

The guidelines for BTEX and TPH are detailed in this document:

http://www.emnrd.state.nm.us/OCD/documents/7C_spill1.pdf

Permissible chloride levels for delineation is determined on a site-by-site basis, using the same ranking criteria as in the 1992 guidelines for BTEX and TPH. Remediation plans are determined after the completion of the delineation stage. Please be advised that permissible chloride levels for delineation are partially dependent on average depth to groundwater using a number of sources, including NMOSE and USGS databases and the Chevron water trend map. Nonetheless, conventionally, remediation of a site would involve 4 ft. excavation of the release area and a properly set minimal 20 mil liner. Bottom and sidewall confirmation samples are required.

During a June 27, 2017 meeting with NMOCD and NMSLO in Hobbs, Mr. Eddie Seay presented one paper copy of laboratory results from March 6, March 28, and May 23, and photos of the Sanmal release site. However, NMOCD and NMSLO both require electronic copies for review and documentation of the corrective actions completed for 1RP-4647. Please submit electronic versions of these documents along with the requested information detailed in conditions of approval attached to the reviewed initial C-141. This is reattached for your convenience.

Thanks,
Olivia

From: Rickey Smith [mailto:rickeylynnsmith@gmail.com]
Sent: Wednesday, July 12, 2017 1:39 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: agroves@slo.state.nm.us; Ernest Padilla <epadillapl@qwestoffice.net>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: Re: San Mal unit

We will attempt to clean later as money is gathered up - could you send me the criteria on the NMOCD ranking score for these spills - In going thru what files we have Yates had used a Ranking Score of 0 - I am not familiar with this scoring - Yates also used a water depth of greater than 100' and no surface wells or water within 1000" - It would help us to determine the extent of clean-up still required -

what documents do you still need as some have been sent in - New tests results?

On Wed, Jul 12, 2017 at 1:28 PM, Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us> wrote:

IPANM EXHIBIT 41

Dear Mr. Smith:

Please be advised that NMOCD will not grant backfill approval unless releases are characterized and remediated according to a NMOCD and NMSLO approved plan. Please send documents pertinent to 1RP-4647 as soon as possible.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
[575-393-6161 x113](tel:575-393-6161x113)

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Rickey Smith [mailto:rickeylynnsmith@gmail.com]
Sent: Wednesday, July 5, 2017 9:31 AM
To: agroves@slo.state.nm.us; Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Ernest Padilla <epadillapl@qwestoffice.net>
Subject: San Mal unit

I have attached the following letter.

I appreciate your patience on this issue as we struggle thru the issues on the San Mal

Rickey Smith

IPANM EXHIBIT 41

From: [Yu, Olivia, EMNRD](#)
To: ["Amanda Taylor"; "agroves@slo.state.nm.us"](#)
Cc: ["seay04@leaco.net"](#)
Subject: RE: SWD 142/LG-3345
Date: Tuesday, June 27, 2017 10:40:00 AM
Attachments: image001.png
image002.png

Good morning Ms. Taylor:

Mr. Seay met with Amber Groves and I this morning about the delineation process thus far for 1RP-4647. In order for a full assessment and subsequent steps, please send the laboratory analyses in an electronic format as well as the other corrective action requirements, such as documentation of depth to groundwater using the NMOSE database or distance to surface waterbodies and water sources. If you have questions/require clarification about what to include in a report, please contact me.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Yu, Olivia, EMNRD
Sent: Tuesday, March 21, 2017 4:56 PM
To: 'Amanda Taylor' <taylortaylor16@aol.com>; agroves@slo.state.nm.us
Subject: RE: SWD 142/LG-3345

Dear Ms. Taylor:

The RP for this incident is

4647	3/21/2017	A	Smith & Marrs	Sanmal Queen Unit battery		17S-33E-1I	3/21/2017
-------------	-----------	---	---------------	---------------------------	--	------------	-----------

Please note that a release characterization/delineation workplan as detailed in the attachment must be approved by NMOCD BEFORE any remediation work.

Also, what is the status of 1RP-2330 that occurred on the same location in October 20, 2009?

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

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IPANM EXHIBIT 41

From: Amanda Taylor [<mailto:taylortaylor16@aol.com>]
Sent: Wednesday, March 15, 2017 3:05 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; agroves@slo.state.nm.us
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; agroves@slo.state.nm.us
Subject: Re: SWD 142/LG-3345

Here is the c141 on the Sanmal Queen Unit LG3345. Please let me know if you need anything more as of now from myself.

Have a great day!

Amanda Taylor

**Smith & Marrs, Inc.
P.O. Box 863
Kermit, TX 79745**

**Office: 432-586-3076
Cell: 432-940-4948
taylortaylor16@aol.com**

-----Original Message-----

From: Yu, Olivia, EMNRD, EMNRD <Olivia.Yu@state.nm.us>
To: Amanda Taylor <taylortaylor16@aol.com>
Cc: Oberding, Tomas, EMNRD, EMNRD <Tomas.Oberding@state.nm.us>; Groves, Amber <agroves@slo.state.nm.us>
Sent: Thu, Feb 23, 2017 11:04 am
Subject: RE: SWD 142/LG-3345

Ms. Taylor:

NMOCD and NMSLO require an update on the issues addressed below. Please provide the requested information ASAP.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

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From: Oberding, Tomas, EMNRD
Sent: Thursday, January 19, 2017 11:46 AM
To: Groves, Amber <agroves@slo.state.nm.us>; Amanda Taylor <taylortaylor16@aol.com>
Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Subject: RE: SWD 142/LG-3345

The OCD would like to confirm that we have no data regarding the site outside of the 2009 C-141.
This site appears out of compliance and a letter of non-compliance may be drafted as the spills evident in the photos appear-

IPANM 002263

IPANM EXHIBIT 41

Over 25bbls

Older than 14 days

Please provide an appropriate C-141 to account for the new spills on site by Monday 1/23/2017.

A complete update as to all remedial activities regarding the 2009 (1RP-2330) spill is also required within 14 days.

-Dr. Oberding

Tomáš 'Doc' Oberding PhD

Hydrologist, Adv-District 1

Oil Conservation Division, EMNRD

(505) 476-3403

E-Mail: tomas.oberding@state.nm.us

一期一会

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From: Groves, Amber [<mailto:agroves@slo.state.nm.us>]

Sent: Thursday, January 19, 2017 9:43 AM

To: Amanda Taylor <taylor16@aol.com>

Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>

Subject: RE: SWD 142/LG-3345

From: Amanda Taylor [<mailto:taylor16@aol.com>]

Sent: Thursday, January 19, 2017 9:17 AM

To: Groves, Amber <agroves@slo.state.nm.us>

Cc: Olivia.Yu@state.nm.us; Tomas.Oberding@state.nm.us

Subject: Re: SWD 142/LG-3345

Let me talk to the field and my supervisor and I will get back to you on this issue. Is there anyway you can send me the pictures in requested to send over to my supervisor?

Thanks

Amanda Taylor

Smith & Marrs, Inc.

P.O. Box 863

Kermit, TX 79745

Office: 432-586-3076

Cell: 432-940-4948

taylor16@aol.com

-----Original Message-----

From: Groves, Amber <agroves@slo.state.nm.us>

To: taylor16 <taylor16@aol.com>

Cc: Yu, Olivia, EMNRD, EMNRD <Olivia.Yu@state.nm.us>; Oberding, Tomas, EMNRD, EMNRD <Tomas.Oberding@state.nm.us>

Sent: Thu, Jan 19, 2017 10:08 am

Subject: RE: SWD 142/LG-3345

Amanda,

IPANM 002264

IPANM EXHIBIT 41

I have been reviewing photographs from my lease inspection and there is also a large spoil pile located on the well pad of Unit #4. I would like to know what the circumstances are behind that and how long it has been there.

Thank you,



Amber Groves

*Remediation Specialist
Field Operations Division*
(575)392-3697
(575)263-3209 cell
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88260

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From: Groves, Amber
Sent: Thursday, January 19, 2017 8:46 AM
To: 'taylor16@aol.com' <taylor16@aol.com>
Cc: 'Yu, Olivia, EMNRD' <Olivia.Yu@state.nm.us>; 'Oberding, Tomas, EMNRD' <Tomas.Oberding@state.nm.us>
Subject: FW: SWD 142/LG-3345

Amanda,

I have a few issues associated with the above listed leases that I would like addressed. The Sanmal Queen Unit tank battery appears to have had numerous releases. There are two historical releases to the south of the perimeter fencing that appear to have come from flow lines. There is a rather large, visibly contaminated spoil pile in the middle of the location that looks as if it has been there for many months with no liner. There is also an open, visibly still impacted excavation on location as well as the tank battery facility being completely full of hydrocarbons and produced water. What we will need for this location is a C-141 submitted to myself as well as Olivia Yu and Tomas Oberding with NMOCD. This site will need to be fully delineated as in all historic impacts, onsite excavation, underneath the spoil pile and within the battery berms. A work plan should follow once the site has been fully delineated. I have copied Olivia and Dr. Oberding on this e-mail for your convenience.

In addition, there is an open RP for this facility that does not seem to have any paperwork beyond the C-141 that needs to be followed up on. It is 1RP-2330. It has been open since 2009, so please advise on the remediation status.

Thank you and feel free to give me a call with any questions or if you would like to set up an onsite meeting.



Amber Groves

IPANM 002265

IPANM EXHIBIT 41

Remediation Specialist
Field Operations Division
(575)392-3697
(575)263-3209 cell
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88260

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Rena Seay

From: "Rena Seay" <seay04@leaco.net>
To: "Rickey Smith" <rickeylynsmith@gmail.com>
Sent: Wednesday, March 08, 2017 9:49 AM
Attach: Inv_103852_1702B58_Final_v3.pdf; Rpt_1702B58_Final_v2.pdf
Subject: Samnal Lease
March 6, 2017

INFORMATION ONLY

Smith & Marrs
ATTN: Jason Smithy
Box 516
Memphis, TX 79245

RE: Samnal Lease
Remediation

Mr. Smith:

The sample results for the Samnal Lease remediation are attached.

The cleanup standards for remediation is based on depth of groundwater. According to OCD guidelines, your site has a ranking criteria of "O". Groundwater in this area is in excess of 100 ft, no water wells or surface water located within 1000 ft.

Cleanup levels are 5000 ppm Total Hydrocarbon (oil) 50 ppm BTEX and 1000 ppm Chloride (salt). The site has not been delineated, additional sampling should be done to meet cleanup standards for Chloride only, BTEX and TPH look OK.

I would suggest taking additional samples at a depth of six (6) ft. at each site 1-10 and we will only test for Chloride.

Please call if you have any questions or need anything further.

Sincerely,

Eddie W. Seay
Eddie Seay Consulting
601 W. Illinois
Hobbs, NM 88242
575-392-2236
seay04@leaco.net

3/8/2017

IPANM EXHIBIT 41



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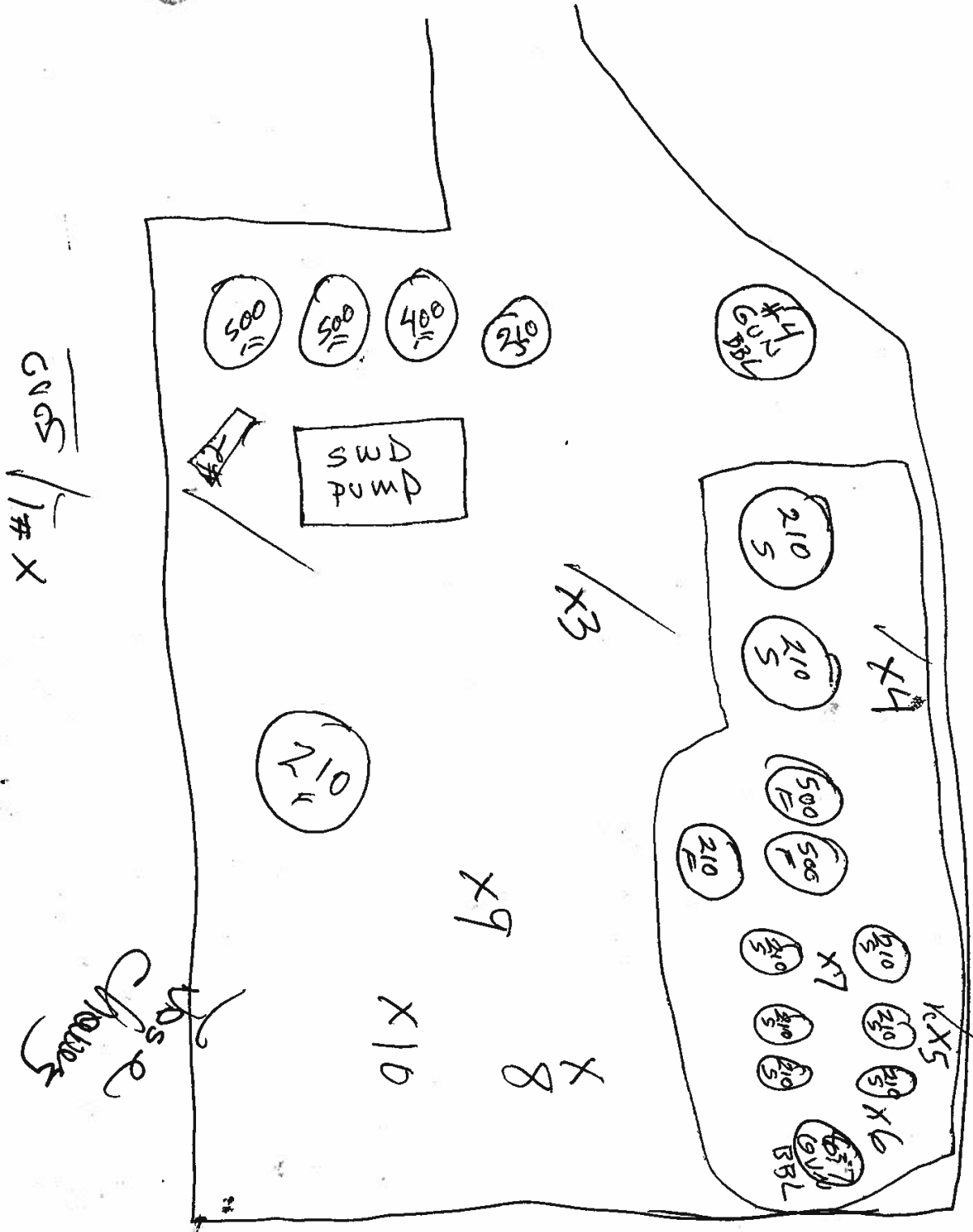


IPANM EXHIBIT 41



IPANM EXHIBIT 41





IPANM EXHIBIT 41



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 06, 2017

Jason Smith
Smith & Marrs
Box 516
Memphis, TX 79245
TEL: (432) 940-1900
FAX

RE: Samnal Lease

OrderNo.: 1702B58

Dear Jason Smith:

Hall Environmental Analysis Laboratory received 30 sample(s) on 2/24/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

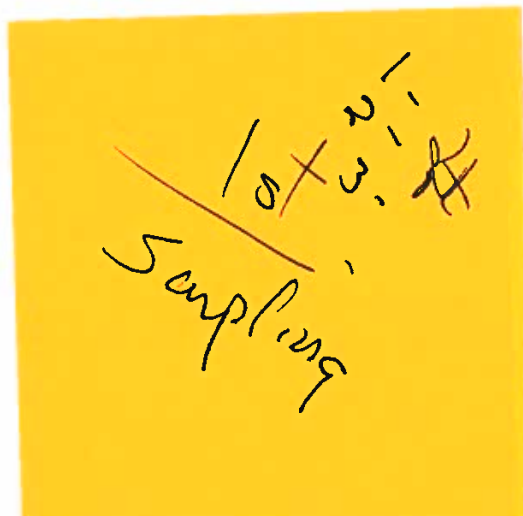
Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman'.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1-1

Project: Samnal Lease

Collection Date: 2/22/2017 6:30:00 AM

Lab ID: 1702B58-001

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/1/2017 10:13:43 AM
Surr: DNOP	97.2	70-130		%Rec	1	3/1/2017 10:13:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 1:29:36 PM
Surr: BFB	83.8	54-150		%Rec	1	3/1/2017 1:29:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 1:29:36 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 1:29:36 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 1:29:36 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/1/2017 1:29:36 PM
Surr: 4-Bromofluorobenzene	89.6	66.6-132		%Rec	1	3/1/2017 1:29:36 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	700	30		mg/Kg	20	3/1/2017 3:08:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-002

Matrix: SOIL

Client Sample ID: S-1-2
Collection Date: 2/22/2017 6:40:00 AM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/1/2017 11:28:40 AM
Surr: DNOP	94.7	70-130		%Rec	1	3/1/2017 11:28:40 AM
EPA METHOD 8015D: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 2:49:00 PM
Surr: BFB	83.5	54-150		%Rec	1	3/1/2017 2:49:00 PM
EPA METHOD 8021B: VOLATILES						
Benzene	ND	0.024		mg/Kg	1	3/1/2017 2:49:00 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 2:49:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 2:49:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/1/2017 2:49:00 PM
Surr: 4-Bromofluorobenzene	91.1	66.6-132		%Rec	1	3/1/2017 2:49:00 PM
EPA METHOD 300.0: ANIONS						
Chloride	1000	75		mg/Kg	50	3/2/2017 11:57:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1-3

Project: Samnal Lease

Collection Date: 2/22/2017 6:55:00 AM

Lab ID: 1702B58-003

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/1/2017 11:50:57 AM
Surr: DNOP	96.2	70-130		%Rec	1	3/1/2017 11:50:57 AM
EPA METHOD 8015D: GASOLINE RANGE						
						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/1/2017 6:47:02 PM
Surr: BFB	88.2	54-150		%Rec	1	3/1/2017 6:47:02 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 6:47:02 PM
Toluene	ND	0.050		mg/Kg	1	3/1/2017 6:47:02 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/1/2017 6:47:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/1/2017 6:47:02 PM
Surr: 4-Bromofluorobenzene	93.4	66.6-132		%Rec	1	3/1/2017 6:47:02 PM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	1400	75		mg/Kg	50	3/2/2017 12:09:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2-1

Project: Samnal Lease

Collection Date: 2/22/2017 7:15:00 AM

Lab ID: 1702B58-004

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	90	9.2		mg/Kg	1	3/1/2017 5:32:36 PM
Surr: DNOP	102	70-130		%Rec	1	3/1/2017 5:32:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/1/2017 7:13:20 PM
Surr: BFB	82.8	54-150		%Rec	1	3/1/2017 7:13:20 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 7:13:20 PM
Toluene	ND	0.046		mg/Kg	1	3/1/2017 7:13:20 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/1/2017 7:13:20 PM
Xylenes, Total	ND	0.062		mg/Kg	1	3/1/2017 7:13:20 PM
Surr: 4-Bromofluorobenzene	90.4	66.6-132		%Rec	1	3/1/2017 7:13:20 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2200	75		mg/Kg	50	3/2/2017 12:22:09 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2-2

Project: Samnal Lease

Collection Date: 2/22/2017 7:30:00 AM

Lab ID: 1702B58-005

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	38	9.4		mg/Kg	1	3/1/2017 6:21:04 PM
Surr: DNOP	99.3	70-130		%Rec	1	3/1/2017 6:21:04 PM
EPA METHOD 8015D: GASOLINE RANGE						
						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 7:39:41 PM
Surr: BFB	75.7	54-150		%Rec	1	3/1/2017 7:39:41 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 7:39:41 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 7:39:41 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 7:39:41 PM
Xylenes, Total	ND	0.088		mg/Kg	1	3/1/2017 7:39:41 PM
Surr: 4-Bromofluorobenzene	82.5	66.6-132		%Rec	1	3/1/2017 7:39:41 PM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	2000	75		mg/Kg	50	3/2/2017 12:34:33 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2-3

Project: Samnal Lease

Collection Date: 2/22/2017 7:50:00 AM

Lab ID: 1702B58-006

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	310	9.8		mg/Kg	1	3/1/2017 7:09:14 PM
Surr: DNOP	96.3	70-130		%Rec	1	3/1/2017 7:09:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/1/2017 8:08:07 PM
Surr: BFB	72.8	54-150		%Rec	1	3/1/2017 8:08:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/1/2017 8:08:07 PM
Toluene	ND	0.050		mg/Kg	1	3/1/2017 8:08:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/1/2017 8:08:07 PM
Xylenes, Total	ND	0.066		mg/Kg	1	3/1/2017 8:08:07 PM
Surr: 4-Bromofluorobenzene	78.1	66.6-132		%Rec	1	3/1/2017 8:08:07 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1800	75		mg/Kg	50	3/2/2017 1:11:47 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3-1

Project: Samnal Lease

Collection Date: 2/22/2017 8:10:00 AM

Lab ID: 1702B58-007

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	150	9.6		mg/Kg	1	3/1/2017 7:57:10 PM
Surr: DNOP	94.2	70-130		%Rec	1	3/1/2017 7:57:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 8:32:21 PM
Surr: BFB	71.7	54-150		%Rec	1	3/1/2017 8:32:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 8:32:21 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 8:32:21 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 8:32:21 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/1/2017 8:32:21 PM
Surr: 4-Bromofluorobenzene	77.2	66.6-132		%Rec	1	3/1/2017 8:32:21 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	13000	750		mg/Kg	500	3/2/2017 1:24:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3-2

Project: Samnal Lease

Collection Date: 2/22/2017 8:30:00 AM

Lab ID: 1702B58-008

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	3/1/2017 8:45:01 PM
Surr: DNOP	92.3	70-130		%Rec	1	3/1/2017 8:45:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/1/2017 8:58:39 PM
Surr: BFB	70.8	54-150		%Rec	1	3/1/2017 8:58:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/1/2017 8:58:39 PM
Toluene	ND	0.047		mg/Kg	1	3/1/2017 8:58:39 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/1/2017 8:58:39 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/1/2017 8:58:39 PM
Surr: 4-Bromofluorobenzene	76.6	66.6-132		%Rec	1	3/1/2017 8:58:39 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	12000	750		mg/Kg	500	3/2/2017 1:36:36 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-3-3

Project: Samnal Lease

Collection Date: 2/22/2017 8:50:00 AM

Lab ID: 1702B58-009

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	51	9.6		mg/Kg	1	3/1/2017 9:32:47 PM
Surr: DNOP	91.6	70-130		%Rec	1	3/1/2017 9:32:47 PM
EPA METHOD 8015D: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/1/2017 9:24:52 PM
Surr: BFB	66.9	54-150		%Rec	1	3/1/2017 9:24:52 PM
EPA METHOD 8021B: VOLATILES						
Benzene	ND	0.024		mg/Kg	1	3/1/2017 9:24:52 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2017 9:24:52 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2017 9:24:52 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/1/2017 9:24:52 PM
Surr: 4-Bromofluorobenzene	71.4	66.6-132		%Rec	1	3/1/2017 9:24:52 PM
EPA METHOD 300.0: ANIONS						
Chloride	8300	300		mg/Kg	200	3/2/2017 1:49:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-4-1

Project: Samnal Lease

Collection Date: 2/22/2017 9:05:00 AM

Lab ID: 1702B58-010

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	2100	99		mg/Kg	10	3/1/2017 2:40:54 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 2:40:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	23	9.3		mg/Kg	2	3/1/2017 9:58:31 AM
Surr: BFB	166	54-150	S	%Rec	2	3/1/2017 9:58:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.047		mg/Kg	2	3/1/2017 9:58:31 AM
Toluene	0.46	0.093		mg/Kg	2	3/1/2017 9:58:31 AM
Ethylbenzene	0.44	0.093		mg/Kg	2	3/1/2017 9:58:31 AM
Xylenes, Total	1.4	0.19		mg/Kg	2	3/1/2017 9:58:31 AM
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	2	3/1/2017 9:58:31 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	430	30		mg/Kg	20	3/1/2017 7:04:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not in Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-011

Matrix: SOIL

Client Sample ID: S-4-2
Collection Date: 2/22/2017 9:20:00 AM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	960	98		mg/Kg	10	3/1/2017 3:05:19 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 3:05:19 PM
EPA METHOD 8015D: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/1/2017 5:54:19 PM
Surr: BFB	114	54-150		%Rec	1	3/1/2017 5:54:19 PM
EPA METHOD 8021B: VOLATILES						
Benzene	ND	0.024		mg/Kg	1	3/1/2017 5:54:19 PM
Toluene	ND	0.048		mg/Kg	1	3/1/2017 5:54:19 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/1/2017 5:54:19 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/1/2017 5:54:19 PM
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	3/1/2017 5:54:19 PM
EPA METHOD 300.0: ANIONS						
Chloride	480	30		mg/Kg	20	3/1/2017 7:16:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-4-3

Project: Samnal Lease

Collection Date: 2/22/2017 9:40:00 AM

Lab ID: 1702B58-012

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	1400	98		mg/Kg	10	3/1/2017 3:29:36 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 3:29:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	20	9.9		mg/Kg	2	3/1/2017 10:51:26 AM
Surr: BFB	202	54-150	S	%Rec	2	3/1/2017 10:51:26 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	2	3/1/2017 10:51:26 AM
Toluene	ND	0.099		mg/Kg	2	3/1/2017 10:51:26 AM
Ethylbenzene	ND	0.099		mg/Kg	2	3/1/2017 10:51:26 AM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 10:51:26 AM
Surr: 4-Bromofluorobenzene	95.9	66.6-132		%Rec	2	3/1/2017 10:51:26 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1300	75		mg/Kg	50	3/2/2017 2:01:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-5-1

Project: Samnal Lease

Collection Date: 2/22/2017 10:00:00 AM

Lab ID: 1702B58-013

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	3300	93		mg/Kg	10	3/1/2017 4:19:28 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 4:19:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	9.8		mg/Kg	2	3/1/2017 11:17:58 AM
Surr: BFB	124	54-150		%Rec	2	3/1/2017 11:17:58 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	2	3/1/2017 11:17:58 AM
Toluene	ND	0.098		mg/Kg	2	3/1/2017 11:17:58 AM
Ethylbenzene	ND	0.098		mg/Kg	2	3/1/2017 11:17:58 AM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 11:17:58 AM
Surr: 4-Bromofluorobenzene	95.2	66.6-132		%Rec	2	3/1/2017 11:17:58 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8400	300		mg/Kg	200	3/2/2017 2:13:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-014

Matrix: SOIL

Client Sample ID: S-5-2
Collection Date: 2/22/2017 10:25:00 AM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	5300	98		mg/Kg	10	3/1/2017 4:43:55 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 4:43:55 PM
EPA METHOD 8015D: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	9.4		mg/Kg	2	3/1/2017 11:44:11 AM
Surr: BFB	111	54-150		%Rec	2	3/1/2017 11:44:11 AM
EPA METHOD 8021B: VOLATILES						
Benzene	ND	0.047		mg/Kg	2	3/1/2017 11:44:11 AM
Toluene	ND	0.094		mg/Kg	2	3/1/2017 11:44:11 AM
Ethylbenzene	ND	0.094		mg/Kg	2	3/1/2017 11:44:11 AM
Xylenes, Total	ND	0.19		mg/Kg	2	3/1/2017 11:44:11 AM
Surr: 4-Bromofluorobenzene	94.4	66.6-132		%Rec	2	3/1/2017 11:44:11 AM
EPA METHOD 300.0: ANIONS						
Chloride	6900	300		mg/Kg	200	3/2/2017 2:28:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-015

Matrix: SOIL

Client Sample ID: S-5-3
Collection Date: 2/22/2017 10:55:00 AM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Analyst: TOM						
Diesel Range Organics (DRO)	4000	94		mg/Kg	10	3/1/2017 5:08:15 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:08:15 PM
EPA METHOD 8015D: GASOLINE RANGE						
Analyst: NSB						
Gasoline Range Organics (GRO)	ND	9.9		mg/Kg	2	3/1/2017 6:20:43 PM
Surr: BFB	104	54-150		%Rec	2	3/1/2017 6:20:43 PM
EPA METHOD 8021B: VOLATILES						
Analyst: NSB						
Benzene	ND	0.050		mg/Kg	2	3/1/2017 6:20:43 PM
Toluene	ND	0.099		mg/Kg	2	3/1/2017 6:20:43 PM
Ethylbenzene	ND	0.099		mg/Kg	2	3/1/2017 6:20:43 PM
Xylenes, Total	ND	0.20		mg/Kg	2	3/1/2017 6:20:43 PM
Surr: 4-Bromofluorobenzene	96.4	66.6-132		%Rec	2	3/1/2017 6:20:43 PM
EPA METHOD 300.0: ANIONS						
Analyst: LGT						
Chloride	4700	300		mg/Kg	200	3/2/2017 2:38:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-6-1

Project: Samnal Lease

Collection Date: 2/22/2017 11:15:00 AM

Lab ID: 1702B58-016

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	2500	91		mg/Kg	10	3/1/2017 5:08:24 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:08:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	60	9.2		mg/Kg	2	3/1/2017 12:36:56 PM
Surr: BFB	330	54-150	S	%Rec	2	3/1/2017 12:36:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.046		mg/Kg	2	3/1/2017 12:36:56 PM
Toluene	0.37	0.092		mg/Kg	2	3/1/2017 12:36:56 PM
Ethylbenzene	0.38	0.092		mg/Kg	2	3/1/2017 12:36:56 PM
Xylenes, Total	2.6	0.18		mg/Kg	2	3/1/2017 12:36:56 PM
Surr: 4-Bromofluorobenzene	105	66.6-132		%Rec	2	3/1/2017 12:36:56 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2500	75		mg/Kg	50	3/2/2017 2:51:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-017

Matrix: SOIL

Client Sample ID: S-6-2
Collection Date: 2/22/2017 11:35:00 AM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	2400	95		mg/Kg	10	3/1/2017 5:29:54 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 5:29:54 PM
EPA METHOD 8015D: GASOLINE RANGE						
Gasoline Range Organics (GRO)	25	9.6		mg/Kg	2	3/1/2017 12:05:00 PM
Surr: BFB	164	54-150	S	%Rec	2	3/1/2017 12:05:00 PM
EPA METHOD 8021B: VOLATILES						
Benzene	ND	0.048		mg/Kg	2	3/1/2017 12:05:00 PM
Toluene	ND	0.096		mg/Kg	2	3/1/2017 12:05:00 PM
Ethylbenzene	ND	0.096		mg/Kg	2	3/1/2017 12:05:00 PM
Xylenes, Total	0.49	0.19		mg/Kg	2	3/1/2017 12:05:00 PM
Surr: 4-Bromofluorobenzene	119	66.6-132		%Rec	2	3/1/2017 12:05:00 PM
EPA METHOD 300.0: ANIONS						
Chloride	2300	150		mg/Kg	100	3/2/2017 3:03:29 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-6-3

Project: Samnal Lease

Collection Date: 2/22/2017 11:50:00 AM

Lab ID: 1702B58-018

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	20000	480		mg/Kg	50	3/1/2017 5:51:23 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 5:51:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	440	24		mg/Kg	5	3/1/2017 12:28:32 PM
Surr: BFB	489	54-150	S	%Rec	5	3/1/2017 12:28:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	3/1/2017 12:28:32 PM
Toluene	8.0	0.24		mg/Kg	5	3/1/2017 12:28:32 PM
Ethylbenzene	5.5	0.24		mg/Kg	5	3/1/2017 12:28:32 PM
Xylenes, Total	21	0.48		mg/Kg	5	3/1/2017 12:28:32 PM
Surr: 4-Bromofluorobenzene	153	66.6-132	S	%Rec	5	3/1/2017 12:28:32 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1000	30		mg/Kg	20	3/1/2017 9:08:33 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7-1

Project: Samnal Lease

Collection Date: 2/22/2017 12:15:00 PM

Lab ID: 1702B58-019

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	7900	450		mg/Kg	50	3/1/2017 6:12:48 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 6:12:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	83	23		mg/Kg	5	3/1/2017 1:03:13 PM
Surr: BFB	214	54-150	S	%Rec	5	3/1/2017 1:03:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.33	0.12		mg/Kg	5	3/1/2017 1:03:13 PM
Toluene	ND	0.23		mg/Kg	5	3/1/2017 1:03:13 PM
Ethylbenzene	0.41	0.23		mg/Kg	5	3/1/2017 1:03:13 PM
Xylenes, Total	0.87	0.46		mg/Kg	5	3/1/2017 1:03:13 PM
Surr: 4-Bromofluorobenzene	106	66.8-132		%Rec	5	3/1/2017 1:03:13 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2400	75		mg/Kg	50	3/2/2017 3:40:43 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7-2

Project: Samnal Lease

Collection Date: 2/22/2017 2:00:00 PM

Lab ID: 1702B58-020

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	3100	97		mg/Kg	10	3/1/2017 8:34:13 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 8:34:13 PM
EPA METHOD 8015D: GASOLINE RANGE						
						Analyst: NSB
Gasoline Range Organics (GRO)	64	4.8		mg/Kg	1	3/1/2017 9:51:08 PM
Surr: BFB	532	54-150	S	%Rec	1	3/1/2017 9:51:08 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/1/2017 9:51:08 PM
Toluene	ND	0.048		mg/Kg	1	3/1/2017 9:51:08 PM
Ethylbenzene	0.25	0.048		mg/Kg	1	3/1/2017 9:51:08 PM
Xylenes, Total	0.30	0.097		mg/Kg	1	3/1/2017 9:51:08 PM
Surr: 4-Bromofluorobenzene	85.8	66.6-132		%Rec	1	3/1/2017 9:51:08 PM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	1200	75		mg/Kg	50	3/2/2017 3:53:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	• Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E	Value above quantitation range
	H Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-7-3

Project: Samnal Lease

Collection Date: 2/22/2017 2:20:00 PM

Lab ID: 1702B58-021

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	3300	480		mg/Kg	50	3/1/2017 6:55:36 PM
Surr: DNOP	0	70-130	S	%Rec	50	3/1/2017 6:55:36 PM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	1500	75		mg/Kg	50	3/2/2017 4:05:33 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
						Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	3/2/2017 12:26:38 AM
Toluene	0.048	0.047		mg/Kg	1	3/2/2017 12:26:38 AM
Ethylbenzene	0.24	0.047		mg/Kg	1	3/2/2017 12:26:38 AM
Xylenes, Total	0.74	0.093		mg/Kg	1	3/2/2017 12:26:38 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	3/2/2017 12:26:38 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 12:26:38 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
						Analyst: DJF
Gasoline Range Organics (GRO)	97	4.7		mg/Kg	1	3/2/2017 12:26:38 AM
Surr: BFB	115	70-130		%Rec	1	3/2/2017 12:26:38 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report
Lab Order 1702B58
Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs
Project: Samnal Lease
Lab ID: 1702B58-022

Matrix: SOIL

Client Sample ID: S-8-1
Collection Date: 2/22/2017 2:45:00 PM
Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	1300	94		mg/Kg	10	3/1/2017 7:16:55 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:16:55 PM
EPA METHOD 300.0: ANIONS						
Chloride	15000	750		mg/Kg	500	3/2/2017 4:17:58 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
Benzene	ND	0.025		mg/Kg	1	3/2/2017 1:51:57 AM
Toluene	ND	0.050		mg/Kg	1	3/2/2017 1:51:57 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 1:51:57 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2017 1:51:57 AM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	3/2/2017 1:51:57 AM
Surr: Toluene-d8	102	70-130		%Rec	1	3/2/2017 1:51:57 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 1:51:57 AM
Surr: BFB	99.0	70-130		%Rec	1	3/2/2017 1:51:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8-2

Project: Samnal Lease

Collection Date: 2/22/2017 3:15:00 PM

Lab ID: 1702B58-023

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
Analyst: TOM						
Diesel Range Organics (DRO)	280	100		mg/Kg	10	3/1/2017 7:38:10 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:38:10 PM
EPA METHOD 300.0: ANIONS						
Analyst: LGT						
Chloride	12000	750		mg/Kg	500	3/2/2017 4:30:22 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
Analyst: DJF						
Benzene	ND	0.024		mg/Kg	1	3/2/2017 3:17:21 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 3:17:21 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 3:17:21 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 3:17:21 AM
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/2/2017 3:17:21 AM
Surr: Toluene-d8	99.5	70-130		%Rec	1	3/2/2017 3:17:21 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
Analyst: DJF						
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 3:17:21 AM
Surr: BFB	95.3	70-130		%Rec	1	3/2/2017 3:17:21 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8-3

Project: Samnal Lease

Collection Date: 2/22/2017 3:40:00 PM

Lab ID: 1702B58-024

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	320	94		mg/Kg	10	3/1/2017 7:59:35 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/1/2017 7:59:35 PM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	7800	300		mg/Kg	200	3/2/2017 4:42:46 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 3:48:12 AM
Toluene	ND	0.050		mg/Kg	1	3/2/2017 3:48:12 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 3:48:12 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2017 3:48:12 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	3/2/2017 3:48:12 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 3:48:12 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 3:48:12 AM
Surr: BFB	92.3	70-130		%Rec	1	3/2/2017 3:48:12 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9-1

Project: Samnal Lease

Collection Date: 2/22/2017 4:10:00 PM

Lab ID: 1702B58-025

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	51	9.4		mg/Kg	1	3/3/2017 9:20:13 AM
Surr: DNOP	114	70-130		%Rec	1	3/3/2017 9:20:13 AM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	15000	750		mg/Kg	500	3/2/2017 4:55:11 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 4:15:09 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 4:15:09 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 4:15:09 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 4:15:09 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: Dibromofluoromethane	108	70-130		%Rec	1	3/2/2017 4:15:09 AM
Surr: Toluene-d8	98.1	70-130		%Rec	1	3/2/2017 4:15:09 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 4:15:09 AM
Surr: BFB	91.0	70-130		%Rec	1	3/2/2017 4:15:09 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9-2

Project: Samnal Lease

Collection Date: 2/22/2017 4:30:00 PM

Lab ID: 1702B58-026

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	23	10		mg/Kg	1	3/2/2017 8:52:38 AM
Surr: DNOP	106	70-130		%Rec	1	3/2/2017 8:52:38 AM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	18000	750		mg/Kg	500	3/2/2017 5:07:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 4:43:52 AM
Toluene	ND	0.048		mg/Kg	1	3/2/2017 4:43:52 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 4:43:52 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 4:43:52 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	3/2/2017 4:43:52 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 4:43:52 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 4:43:52 AM
Surr: BFB	93.1	70-130		%Rec	1	3/2/2017 4:43:52 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9-3

Project: Samnal Lease

Collection Date: 2/22/2017 4:55:00 PM

Lab ID: 1702B58-027

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	26	9.6		mg/Kg	1	3/2/2017 9:14:15 AM
Surr: DNOP	107	70-130		%Rec	1	3/2/2017 9:14:15 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	12000	750		mg/Kg	500	3/2/2017 5:20:00 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 5:12:16 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 5:12:16 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 5:12:16 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 5:12:16 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	3/2/2017 5:12:16 AM
Surr: Toluene-d8	101	70-130		%Rec	1	3/2/2017 5:12:16 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 5:12:16 AM
Surr: BFB	95.0	70-130		%Rec	1	3/2/2017 5:12:16 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-10-1

Project: Samnal Lease

Collection Date: 2/22/2017 5:15:00 PM

Lab ID: 1702B58-028

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	73	9.7		mg/Kg	1	3/2/2017 9:35:39 AM
Surr: DNOP	108	70-130		%Rec	1	3/2/2017 9:35:39 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	11000	750		mg/Kg	500	3/2/2017 5:32:24 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	3/2/2017 5:40:31 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 5:40:31 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 5:40:31 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 5:40:31 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	3/2/2017 5:40:31 AM
Surr: Toluene-d8	98.8	70-130		%Rec	1	3/2/2017 5:40:31 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 5:40:31 AM
Surr: BFB	89.1	70-130		%Rec	1	3/2/2017 5:40:31 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level - D Sample Diluted Due to Matrix - H Holding times for preparation or analysis exceeded - ND Not Detected at the Reporting Limit - R RPD outside accepted recovery limits - S % Recovery outside of range due to dilution or matrix	- B Analyte detected in the associated Method Blank - E Value above quantitation range - J Analyte detected below quantitation limits - P Sample pH Not In Range - RL Reporting Detection Limit - W Sample container temperature is out of limit as specified
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IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

CLIENT: Smith & Marrs

Client Sample ID: S-10-2

Project: Samnal Lease

Collection Date: 2/22/2017 5:30:00 PM

Lab ID: 1702B58-029

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						
						Analyst: TOM
Diesel Range Organics (DRO)	55	10		mg/Kg	1	3/2/2017 9:57:18 AM
Surr: DNOP	108	70-130		%Rec	1	3/2/2017 9:57:18 AM
EPA METHOD 300.0: ANIONS						
						Analyst: LGT
Chloride	8600	750		mg/Kg	500	3/2/2017 6:09:39 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						
						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 6:09:17 AM
Toluene	ND	0.049		mg/Kg	1	3/2/2017 6:09:17 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 6:09:17 AM
Xylenes, Total	ND	0.087		mg/Kg	1	3/2/2017 6:09:17 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	3/2/2017 6:09:17 AM
Surr: Toluene-d8	99.5	70-130		%Rec	1	3/2/2017 6:09:17 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						
						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 6:09:17 AM
Surr: BFB	89.9	70-130		%Rec	1	3/2/2017 6:09:17 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1702B58

Date Reported: 3/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-10-3

Project: Samnal Lease

Collection Date: 2/22/2017 5:50:00 PM

Lab ID: 1702B58-030

Matrix: SOIL

Received Date: 2/24/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	110	9.6		mg/Kg	1	3/2/2017 10:19:00 AM
Surr: DNOP	110	70-130		%Rec	1	3/2/2017 10:19:00 AM
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	9400	750		mg/Kg	500	3/2/2017 6:22:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	3/2/2017 6:37:43 AM
Toluene	ND	0.048		mg/Kg	1	3/2/2017 6:37:43 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 6:37:43 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 6:37:43 AM
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	3/2/2017 6:37:43 AM
Surr: Toluene-d8	99.4	70-130		%Rec	1	3/2/2017 6:37:43 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 6:37:43 AM
Surr: BFB	88.9	70-130		%Rec	1	3/2/2017 6:37:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limit
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1703D59

Date Reported:

CLIENT: Smith & Marrs

Client Sample ID: S-1

Project: Samnal

Collection Date: 3/24/2017 10:15:00 AM

Lab ID: 1703D59-001

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	1100	30		mg/Kg	20	3/30/2017 11:00:18 AM



Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-2

Project: Samnal

Collection Date: 3/24/2017 10:45:00 AM

Lab ID: 1703D59-002

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8500	750		mg/Kg	500	3/30/2017 7:31:12 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3

Project: Samnal

Collection Date: 3/24/2017 11:10:00 AM

Lab ID: 1703D59-003

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	4800	300		mg/Kg	200	3/30/2017 7:43:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	• Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-4

Project: Samnal

Collection Date: 3/24/2017 11:30:00 AM

Lab ID: 1703D59-004

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	780	30		mg/Kg	20	3/30/2017 12:27:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level. - D Sample Diluted Due to Matrix - H Holding times for preparation or analysis exceeded - ND Not Detected at the Reporting Limit - R RPD outside accepted recovery limits - S % Recovery outside of range due to dilution or matrix	- B Analyte detected in the associated Method Blank - E Value above quantitation range - J Analyte detected below quantitation limits - P Sample pH Not In Range - RL Reporting Detection Limit - W Sample container temperature is out of limit as specified
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IPANM EXHIBIT 41

Analytical Report

Lab Order 1703DS9

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-5

Project: Samnal

Collection Date: 3/24/2017 12:00:00 PM

Lab ID: 1703DS9-005

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8600	300		mg/Kg	200	3/30/2017 7:58:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-6

Project: Samnal

Collection Date: 3/24/2017 12:25:00 PM

Lab ID: 1703D59-006

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3300	150		mg/Kg	100	3/30/2017 8:08:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7

Project: Samnal

Collection Date: 3/24/2017 12:55:00 PM

Lab ID: 1703D59-007

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	18000	750		mg/Kg	500	3/30/2017 8:20:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	• Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8

Project: Samnal

Collection Date: 3/24/2017 1:20:00 PM

Lab ID: 1703D59-008

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8400	750		mg/Kg	500	3/30/2017 8:33:18 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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IPANM EXHIBIT 41

Analytical Report

Lab Order 1703D59

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9

Project: Samnal

Collection Date: 3/24/2017 1:40:00 PM

Lab ID: 1703D59-009

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	4500	150		mg/Kg	100	3/30/2017 9:10:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 9 of 0
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1703D59

Date Reported:

CLIENT: Smith & Marrs

Client Sample ID: S-10

Project: Samnal

Collection Date: 3/24/2017 2:00:00 PM

Lab ID: 1703D59-010

Matrix: SOIL

Received Date: 3/28/2017 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	8800	750		mg/Kg	500	3/30/2017 9:22:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 23, 2017

Jason Smith
Smith & Marrs
Box 516
Memphis, TX 79245
TEL: (432) 940-1900
FAX

RE: Sammal

OrderNo.: 1705874

Dear Jason Smith:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/17/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

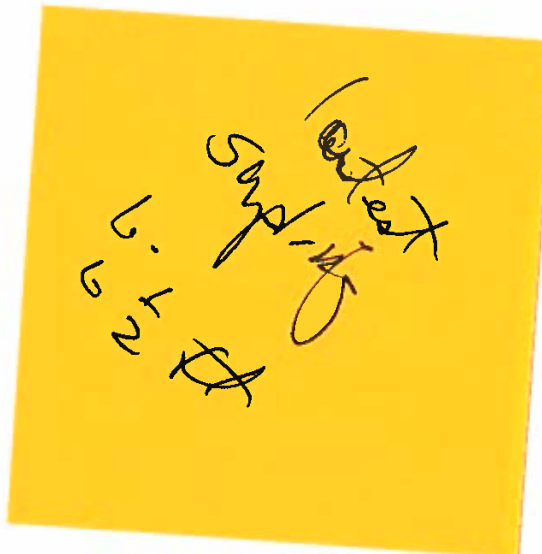
Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman'.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-1

Project: Samnal

Collection Date: 5/15/2017 6:20:00 AM

Lab ID: 1705874-001

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	2900	150		mg/Kg	100	5/19/2017 7:01:56 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1705874

Date Reported:

CLIENT: Smith & Marrs

Client Sample ID: S-2

Project: Samnal

Collection Date: 5/15/2017 6:40:00 AM

Lab ID: 1705874-002

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	2300	75		mg/Kg	50	5/19/2017 7:14:20 PM

Analyst: LGT

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-3

Project: Samnal

Collection Date: 5/15/2017 7:00:00 AM

Lab ID: 1705874-003

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1200	75		mg/Kg	50	5/19/2017 7:28:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-4

Project: Samnal

Collection Date: 5/15/2017 7:30:00 AM

Lab ID: 1705874-004

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	310	30		mg/Kg	20	5/19/2017 7:39:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-5

Project: Samnal

Collection Date: 5/15/2017 7:50:00 AM

Lab ID: 1705874-005

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	1200	75		mg/Kg	50	5/19/2017 7:51:35 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level. - D Sample Diluted Due to Matrix - H Holding times for preparation or analysis exceeded - ND Not Detected at the Reporting Limit - R RPD outside accepted recovery limits - S % Recovery outside of range due to dilution or matrix	- B Analyte detected in the associated Method Blank - E Value above quantitation range - J Analyte detected below quantitation limits - P Sample pH Not In Range - RL Reporting Detection Limit - W Sample container temperature is out of limit as specified
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IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-6

Project: Samnal

Collection Date: 5/15/2017 8:15:00 AM

Lab ID: 1705874-006

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3800	150		mg/Kg	100	5/19/2017 8:04:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-7

Project: Samnal

Collection Date: 5/15/2017 8:45:00 AM

Lab ID: 1705874-007

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	880	30		mg/Kg	20	Analyst: LGT 5/18/2017 8:41:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-8

Project: Samnal

Collection Date: 5/15/2017 9:10:00 AM

Lab ID: 1705874-008

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	360	30		mg/Kg	20	Analyst: LGT 5/19/2017 8:53:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-9

Project: Samnal

Collection Date: 5/15/2017 9:30:00 AM

Lab ID: 1705874-009

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	7800	300		mg/Kg	200	5/19/2017 8:08:03 PM

Analyst: LGT

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

Analytical Report

Lab Order 1705874

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Smith & Marrs

Client Sample ID: S-10

Project: Samnal

Collection Date: 5/15/2017 10:00:00 AM

Lab ID: 1705874-010

Matrix: SOIL

Received Date: 5/17/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	3400	150		mg/Kg	100	5/18/2017 9:18:28 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

IPANM EXHIBIT 41

From: Mann, Ryan
To: ["Rickey Smith"](#)
Cc: [Yu, Olivia, EMNRD](#)
Subject: RE: 1RP-4647 San Mal Queen SWD/CTB remediation
Date: Wednesday, August 15, 2018 4:47:52 PM

I haven't received any additional documents for you. Please resubmit those if available. The site needs to be delineated. This means soil samples will need to be taken, mostly likely deeper than the caliche layer. In order to move forward the location needs to have the contamination delineated. From this information an appropriate remediation plan can be developed. The first step is to delineate the site. It seems apparent to me that the contamination extends below the top of the caliche layer and will require a drill retrieve the soil samples. Please contact me if you have any questions. I too, want to move forward and resolve this.

Ryan Mann
Remediation Specialist
Field Operation Division
(575) 392-3697
(505) 699-1989
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88240

From: Rickey Smith [mailto:rickeylynnsmith@gmail.com]
Sent: Wednesday, August 15, 2018 7:17 AM
To: Mann, Ryan <rmann@slo.state.nm.us>
Subject: Re: 1RP-4647 San Mal Queen SWD/CTB remediation

Did you receive the information I sent - I am confused as to what you need - It will take a large piece of machinery to break thru the barrier - I certainly do not want to do that as if any leak occurred then it would certainly go deeper - I need to move forward and am confused as what to do

Rickey Smith

On Fri, Aug 3, 2018 at 1:21 PM, Mann, Ryan <rmann@slo.state.nm.us> wrote:

Hello Mr. Smith,
A meeting at the above site occurred this morning with myself (NMSLO), Christina Hernandez (NMOCD), Adam, and Jose in attendance. Discussion included the remediation work performed up to this point and a pathway forward to work towards closure of the remediation permit. It seems that some maintenance work, including removal of contaminated soil, has occurred in the areas around the CTB and SWD. However, the remainder of the site has had no remediation work conducted. The laboratory analytics previously provided indicated the extent of the contamination has not been fully defined, and will require additional delineation and soil sampling efforts. Mr. Chavez indicated previous sampling efforts were halted due to refusal. Unfortunately, refusal is not an acceptable justification for incomplete release delineation. My thoughts are that this will

IPANM EXHIBIT 41

require an environmental consultant that is familiar with these types of situation and equipped to perform the work, but I will not direct your work.
NMSLO, NMOCD, and yourself all have an interest in resolution of this situation. As such, can you please inform on the your path forward? Please call or email if you would like to discuss this further or have any questions.

Thanks

Ryan Mann

Remediation Specialist

Field Operation Division

(575) 392-3697

(505) 699-1989

New Mexico State Land Office

[2827 N. Dal Paso Suite 117](#)

[Hobbs, NM 88240](#)

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IPANM EXHIBIT 41



HRL
COMPLIANCE
SOLUTIONS

Approved with conditions.
See email correspondence.

P.O. Box 1708 • Artesia, NM 88211
www.hrlcomp.com

1RP-4647

SUBJECT: SOIL REMEDIATION PLAN FOR THE INCIDENT AT THE Sanmal Queen Unit, LEA COUNTY, NEW MEXICO

On behalf of Smith and Marrs, HRL Compliance Solutions, Inc (HRL) has prepared this remediation plan that describes the assessment, characterization, and proposed remediation for a release associated with the Sanmal Queen Unit. The site is in Unit I, SECTION 1, TOWNSHIP 17S, RANGE 23E, NMPM, Lea County, New Mexico, on State land.

Site Assessment/Characterization

An assessment of surrounding water well information identifies 55 water wells thin a 3-mile buffer. Average depth to water is over 100 feet bgs. This information is illustrated in Attachment A.

There are no features of concern identified within proximity of the site. There is no flowing watercourse or significant watercourse within 300 feet of this location. There is no lakebed, sinkhole, or playa lake within 200 feet for this location. This location is not within 300 feet of an occupied permanent residence, school, hospital, institution, or church. This location is not with 500 feet for a spring or domestic freshwater well. This facility is not within incorporated municipal boundaries or within a defined municipal freshwater well field. This is illustrated in Attachment B.

An assessment of wetlands and springs was performed using USGS National Water Information System and re-verified utilizing a 7.5-minute topographical map There are no wetlands with 300 feet of this location. There are no springs within 1000 feet of this location. This map is in Attachment B.

This facility is not within a 100-year floodplain as per FEMA. A portion of the FEMA map is in Attachment B.

This location is an area identified as an unstable karst geology area. An area map generated with data from the USGS showing geologic units and structural features is in Attachment B.

Upon receiving clearance from the underground utility locate (811) on September 25, 2018, HRL field personnel assessed the impacted area. Samples were collected on 9/25/2018 to characterize the extent of impacts and calculate a volume of soil to be excavated for disposal with a backhoe. All samples were collected and analyzed at a National Environmental Laboratory Accreditation Program (NELAP) laboratory and in accordance with NMOCD soil sampling procedures. The samples were submitted to Cardinal Laboratory for analyses including chlorides by Method 4500, volatile organics (BTEX) by Method 8021B, and MRO, DRO, and GRO by EPA Method 8015B. Sample locations are depicted in Attachment C. All laboratory results are summarized in Table 1 with raw analytical reports included in Attachment D.

IPANM EXHIBIT 41



Table 1: Analytical Results Summary

Sammal Lease								
Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	TPH mg/Kg
S1- Surface	9/25/2018	80	ND	ND	ND	ND	ND	ND
S1-1'	9/25/2018	1,440	ND	ND	ND	ND	ND	ND
S1-2'	9/25/2018	1,100						
S2 Surface	9/25/2018	928			ND	51	48	99
S2-1'	9/25/2018	9,600	ND	ND	ND	ND	ND	ND
S2-2'	9/25/2018	8,530	ND	ND	ND	ND	ND	ND
S3 Surface	9/25/2018	2,760				39	12	50
S3-1'	9/25/2018	1,460				14		14
S3-1.5'	9/25/2018	6,080	ND	ND	ND	ND	ND	ND
S4 Surface	9/25/2018	8,880				177	84	261
S4-1'	9/25/2018	7,440				224	65	289
S5 Surface	9/25/2018	4,960				543	243	786
S5-1'	9/25/2018	8,400				262	124	386
S6 Surface	9/25/2018	31,600				10		10
S6-1'	9/25/2018	14,100	ND	ND	ND	ND	ND	ND
S7 Surface	9/25/2018	160				348	251	599
S7-1'	9/25/2018	80				77	65	142
S7-2'	9/25/2018	176				194	123	317
S8 Surface	9/25/2018	3,200				737	197	934
S8-1'	9/25/2018	3,200				12		12

IPANM EXHIBIT 41



Closure Criteria Assessment

Closure Criteria		
Depth to Ground Water	Constituent	Limit
≤ 100 feet	Chloride	20,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Remediation Plan

The area around Sample Point 6 will be excavated to an approximate depth of 1 foot. Per the direction of the State Land Office (see email in Attachment E), a liner is required at SP6 prior to backfill. In addition, the State Land Office is requiring an excavation around SP1 to a depth of 2 feet with a liner and appropriate top soil replaced. A total of 980 cubic yards is estimated to be removed. Confirmation samples will be taken from both excavation areas prior to backfill.

Remediation is scheduled to begin within 90 days of approval of this remediation plan.

Restoration, Reclamation, and Revegetation

SP6 is on an active pad and will be returned to use as such. The area around SP1 will be seeded as per SLO guidelines.

If there are any questions regarding this report, please contact Jennifer Knowlton at 505-238-3588.

Submitted by:
HRL Compliance Solutions, Inc

Jennifer Knowlton
Regional Manager - Permian

Attachments:

Attachment A: NMOSE Depth to Water Map and Report

Attachment B: Site Location Map

Wetlands Map

Floodplain Map

Karst Area Map

Attachment C: Sample Location Map

Attachment D: Laboratory Analytical Reports

Attachment E: State Land Office Email

Smith&Marrs | Sanmal Queen Unit | 10/22/2018

IPANM 002330

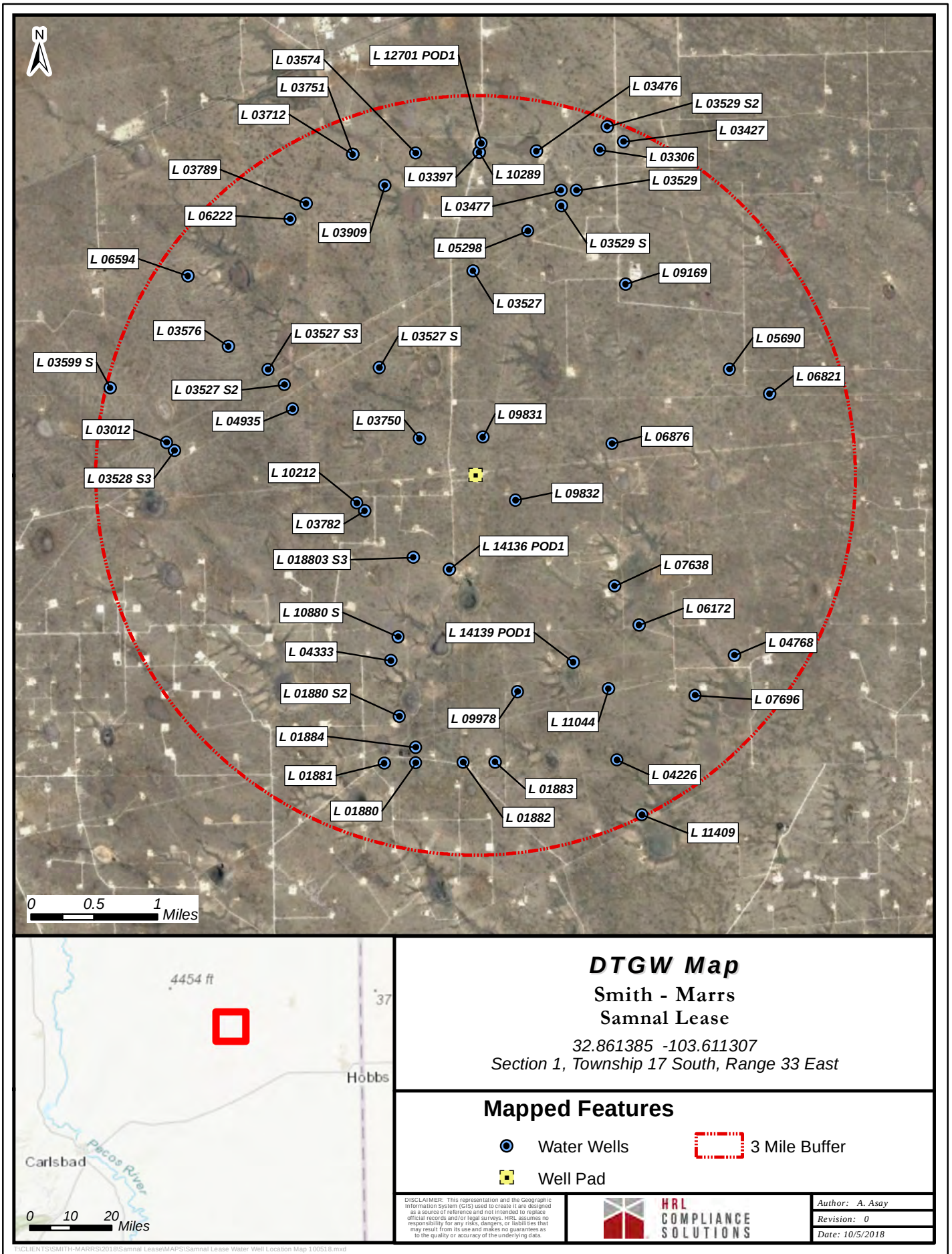
IPANM EXHIBIT 41



Attachment A:

NMOSE Depth to Water Map and Report

IPANM EXHIBIT 41



IPANM 002332

IPANM EXHIBIT 41



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 09831	L	LE		4	2	01	17S	33E		630034	3637246*	481	200		
L 09832	L	LE		3	3	06	17S	34E		630449	3636447*	610	200		
L 03750	L	LE		4	1	01	17S	33E		629228	3637230*	839	180	150	30
L 14136 POD1	L	LE		3	3	2	12	17S	33E	629604	3635569	1249	245	141	104
L 01880 S3	L	LE		1	4	1	12	17S	33E	629148	3635720*	1315	268	155	113
L 03782	L	LE		4	4	4	02	17S	33E	628532	3636311*	1476	183	151	32
L 10212	L	LE		4	4	02	17S	33E		628433	3636412*	1543	273	168	105
L 06876	L	LE		4	4	2	06	17S	34E	631676	3637166*	1785	191	120	71
L 03527 S	L	LE		1	1	3	36	16S	33E	628715	3638131*	1823	250	160	90
L 07638	L	LE		2	2	4	07	17S	34E	631710	3635356*	2273	206	140	66
L 01880 S	L	LE		4	3	3	12	17S	33E	628955	3634708*	2286	259	115	144
L 04935	L	LE		2	1	02	17S	33E		627614	3637606*	2464	204	162	42
L 03527	L	LE		1	2	2	36	16S	33E	629907	3639359*	2584	278	125	153
L 04333	L	LE		1	1	13	17S	33E		628862	3634407*	2598	217	165	52
L 03527 S2	L	LE		3	4	3	35	16S	33E	627508	3637911*	2678	275	138	137
L 14139 POD1	L	LE		3	1	2	18	17S	34E	631180	3634389	2691	230	138	92
L 09978	L	LE		1	3	1	18	17S	34E	630476	3634015	2812	198	160	38
L 06172	L	LE		3	3	08	17S	34E		632019	3634860*	2831	202	140	62
L 03527 S3	L	LE		2	3	3	35	16S	33E	627305	3638104*	2945	240	155	85
L 09169	L	LE		3	1	1	32	16S	34E	631846	3639195*	3084	180	60	120
L 05298	L	LE		3	30	16S	34E			630606	3639870*	3167	145	94	51
L 11044	L	LE		4	2	18	17S	34E		631629	3634049*	3209	150		
L 01880 S2	L	LE		2	1	3	13	17S	33E	628972	3633702*	3219	235	151	84
L 05690	L	LE		4	4	32	16S	34E		633170	3638112*	3501	465	100	365
L 03576	L	LE		2	4	34	16S	33E		626799	3638401*	3531	212	160	52
L 01884	L	LE		1	4	3	13	17S	33E	629181	3633306*	3549	250		

*UTM location was derived from PLSS - see Help

IPANM EXHIBIT 41

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 03529 S	L	LE		1	1	4	30	16S	34E	631030	3640184*	3581	260	170	90
L 01883	L	LE		4	4	4	13	17S	33E	630189	3633119*	3664	260	147	113
L 01882	L	LE		4	3	4	13	17S	33E	629785	3633112*	3665	245		
L 01880	L	LE		3	4	3	13	17S	33E	629181	3633106*	3745	245		
L 03477	L	LE		3	3	2	30	16S	34E	631024	3640386*	3772	150	115	35
L 03528 S3	L	LE		4	4	1	03	17S	33E	626111	3637078*	3834	271	155	116
L 03529	L	LE		4	3	2	30	16S	34E	631224	3640386*	3834	260	120	140
L 03909	L	LE			3	1	25	16S	33E	628785	3640445*	3845	180	120	60
L 01881	L	LE		3	3	3	13	17S	33E	628778	3633100*	3852	242		
L 06821	L	LE		2	1	1	04	17S	34E	633680	3637800*	3884	180	65	115
L 03012	L	LE			4	1	03	17S	33E	626012	3637179*	3942	210	155	55
L 07696	L	LE		3	3	2	17	17S	34E	632735	3633968*	3965	200	160	40
L 06222	L	LE			2	3	26	16S	33E	627582	3640022*	4009	205	154	51
L 04768	L	LE			2	2	17	17S	34E	633233	3634478*	4020	190	90	100
L 03789	L	LE					26	16S	33E	627788	3640216*	4055	223	145	78
L 04226	L	LE		4	4	4	18	17S	34E	631741	3633143*	4056	166		
L 03397	L	LE			2	2	25	16S	33E	629987	3640869*	4094	160	124	36
L 10289	L	LE			2	2	25	16S	33E	629987	3640869*	4094	200		
L 03574	L	LE			2	1	25	16S	33E	629182	3640855*	4148	160	115	45
L 03476	L	LE			2	1	30	16S	34E	630717	3640882*	4181	166	115	51
L 12701 POD1	L									630011	3640983	4209	235		
L 03712	L	LE			2	2	26	16S	33E	628377	3640841*	4354	170	135	35
L 03751	L	LE			2	2	26	16S	33E	628377	3640841*	4354	175		
L 03306	L	LE			2	2	30	16S	34E	631521	3640897*	4417	190	125	65
L 06594	L	LE		1	1	2	34	16S	33E	626284	3639297*	4436	230	160	70
L 03427	L	LE		1	1	1	29	16S	34E	631822	3641003*	4630	170	118	52
L 03529 S2	L	LE		4	4	4	19	16S	34E	631614	3641198*	4731	262	116	146
L 03599 S	L	LE		4	4	4	33	16S	33E	625293	3637871	4768	287	175	112
L 11049	L	LE			3	1	20	17S	34E	632056	3632445*	4821	250	140	110

*UTM location was derived from PLSS - see Help

IPANM EXHIBIT 41

(A CLW##### in the
POD suffix indicates the
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(R=POD has
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(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
------------	--------------	-------	--------	------	------	-----	-----	-----	-----	---	---	----------	------------	-------------	--------------

Average Depth to Water: **135 feet**

Minimum Depth: **60 feet**

Maximum Depth: **175 feet**

Record Count: 55

UTMNAD83 Radius Search (in meters):

Easting (X): 629933.66

Northing (Y): 3636774.75

Radius: 4828

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

IPANM EXHIBIT 41



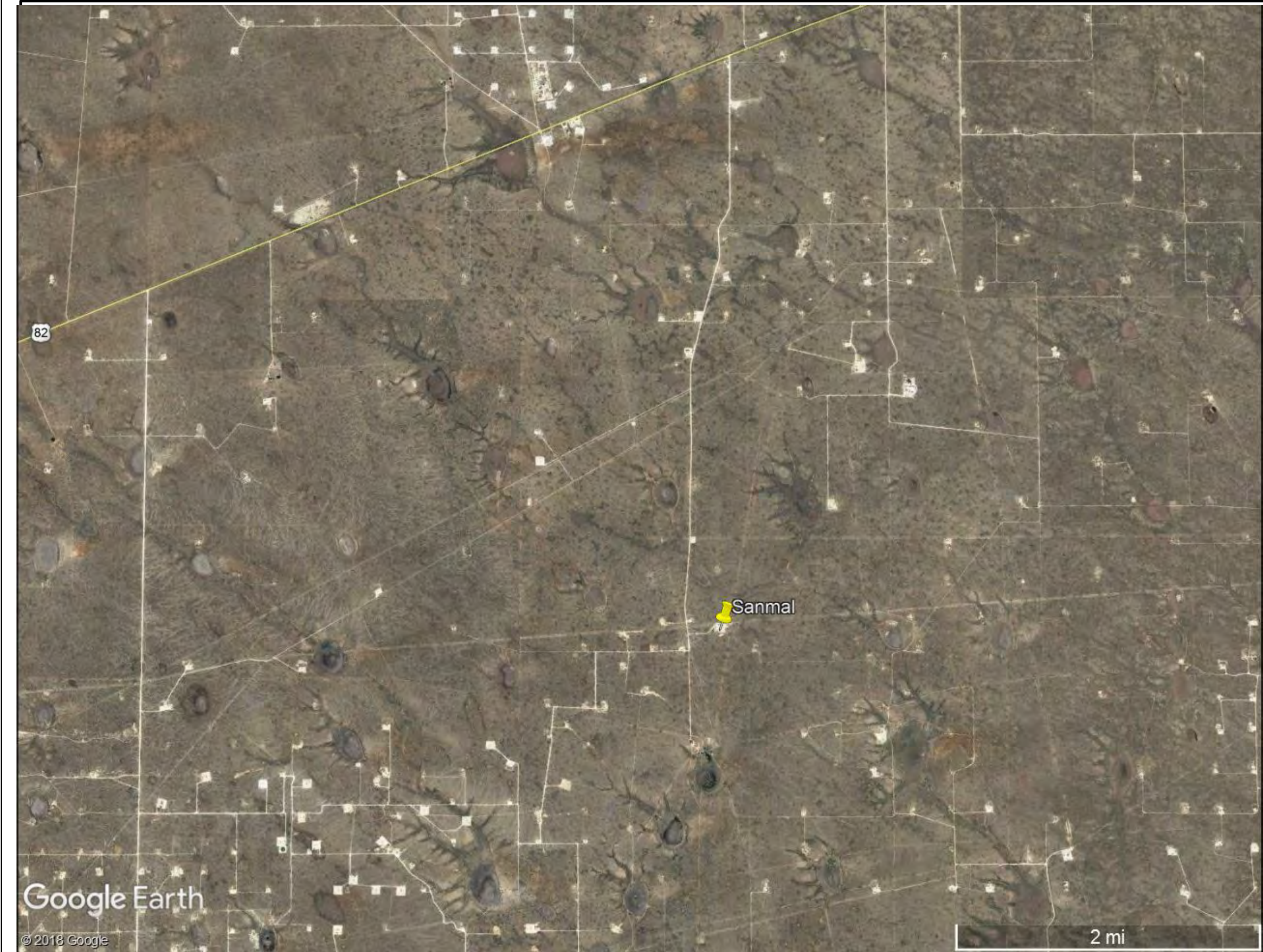
Attachment B:

Site Location Map

Wetlands Map

Floodplain Map

Karst Area Map



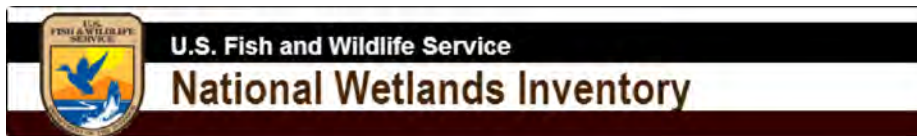
Site Location Map
Smith and Marrs/Sanmal
Queen Unit
Section 1, Township 17S, Range 33E

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



Author: J. Knowlton
Rev: 0
Date: 10/18/2018

IPANM EXHIBIT 41



Sanmal Queen Unit



October 18, 2018

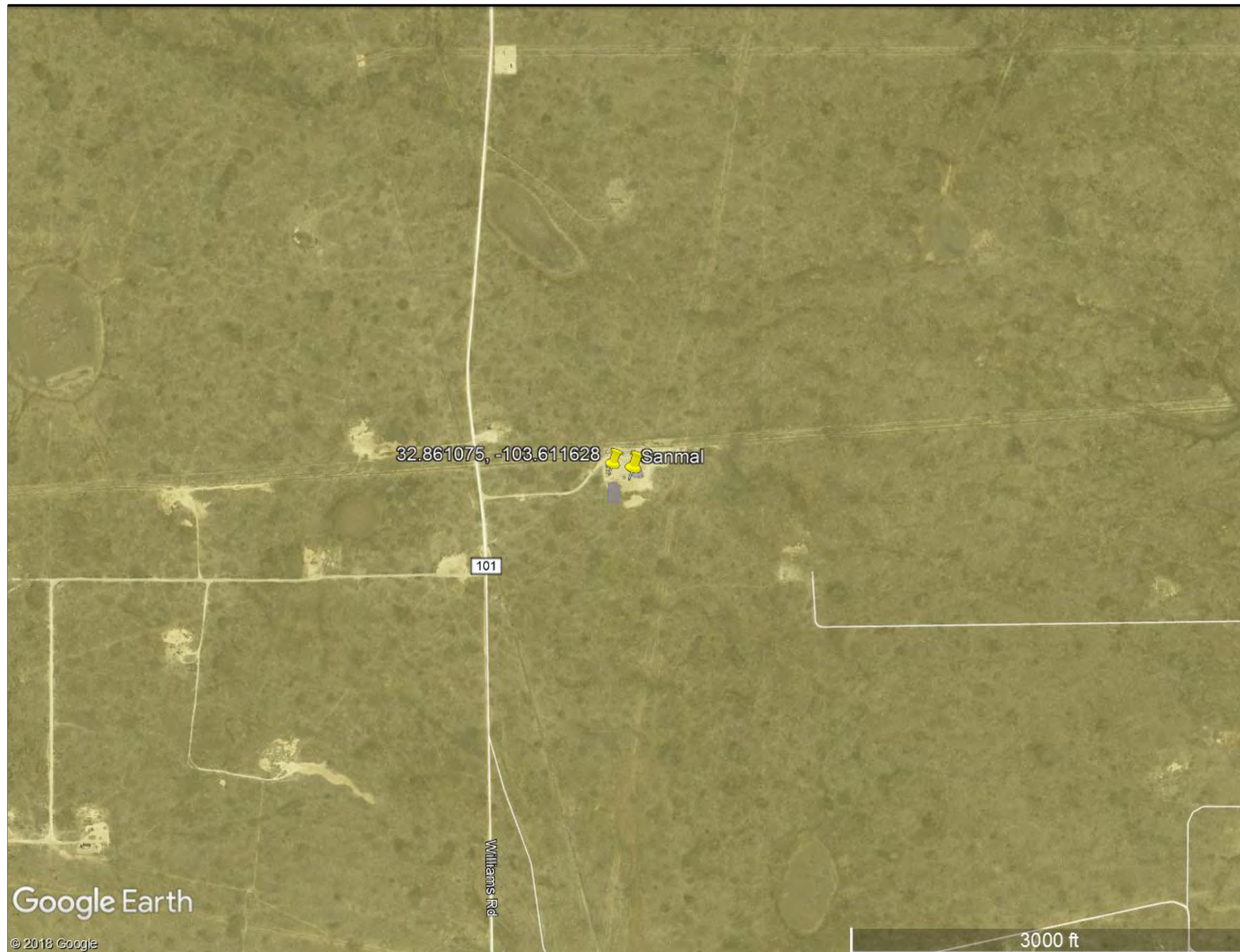
Wetlands

Estuarine and Marine Deepwater	Freshwater Emergent Wetland	Lake
Estuarine and Marine Wetland	Freshwater Forested/Shrub Wetland	Other
	Freshwater Pond	Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

IPANM 002338



Site Location Map

Smith and Marrs/Sanmal
Queen Unit

Section 1, Township 17S, Range 33E



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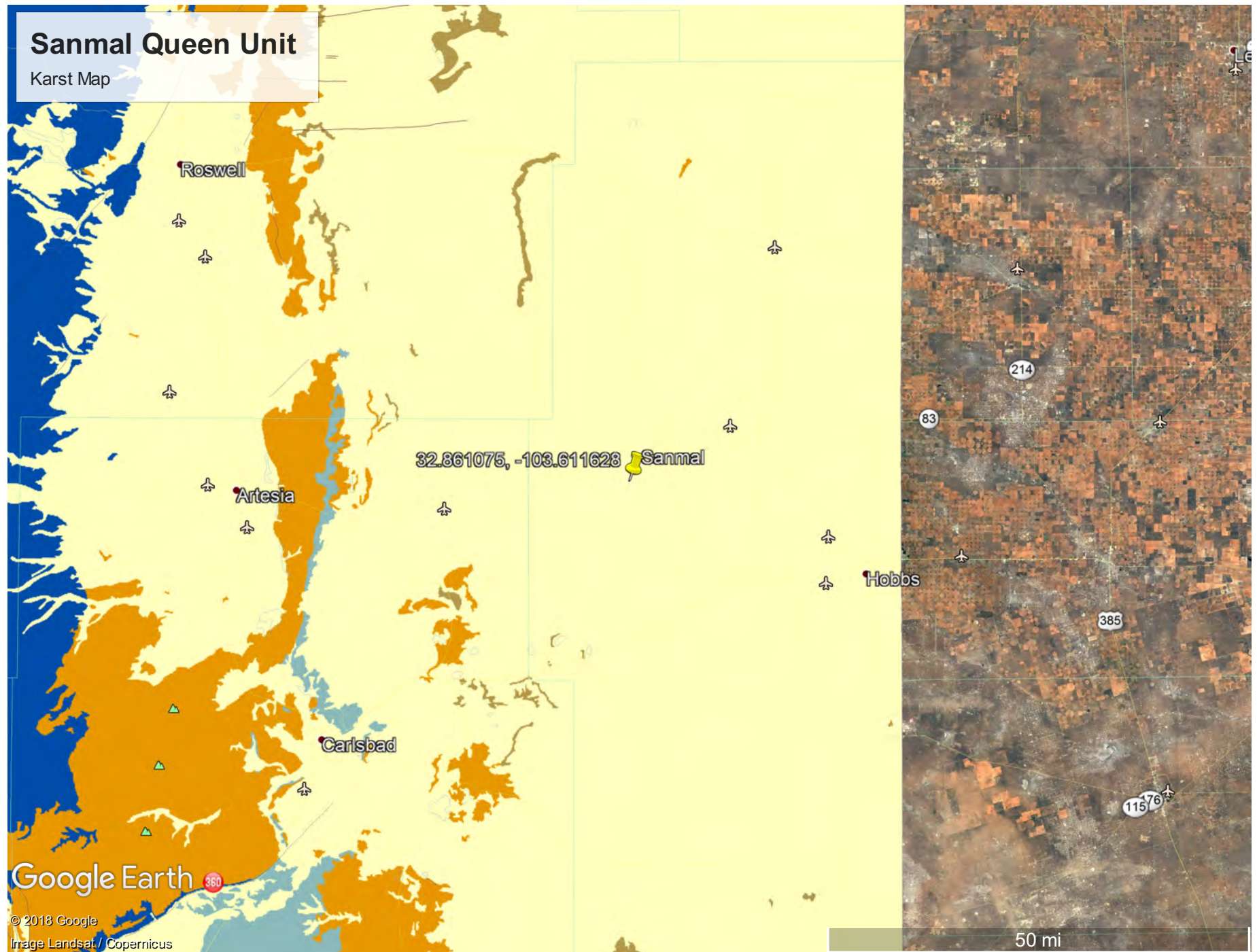


Author: J. Knowlton

Rev: 0

Date: 10/18/2018

IPANM EXHIBIT 41



IPANM 002340

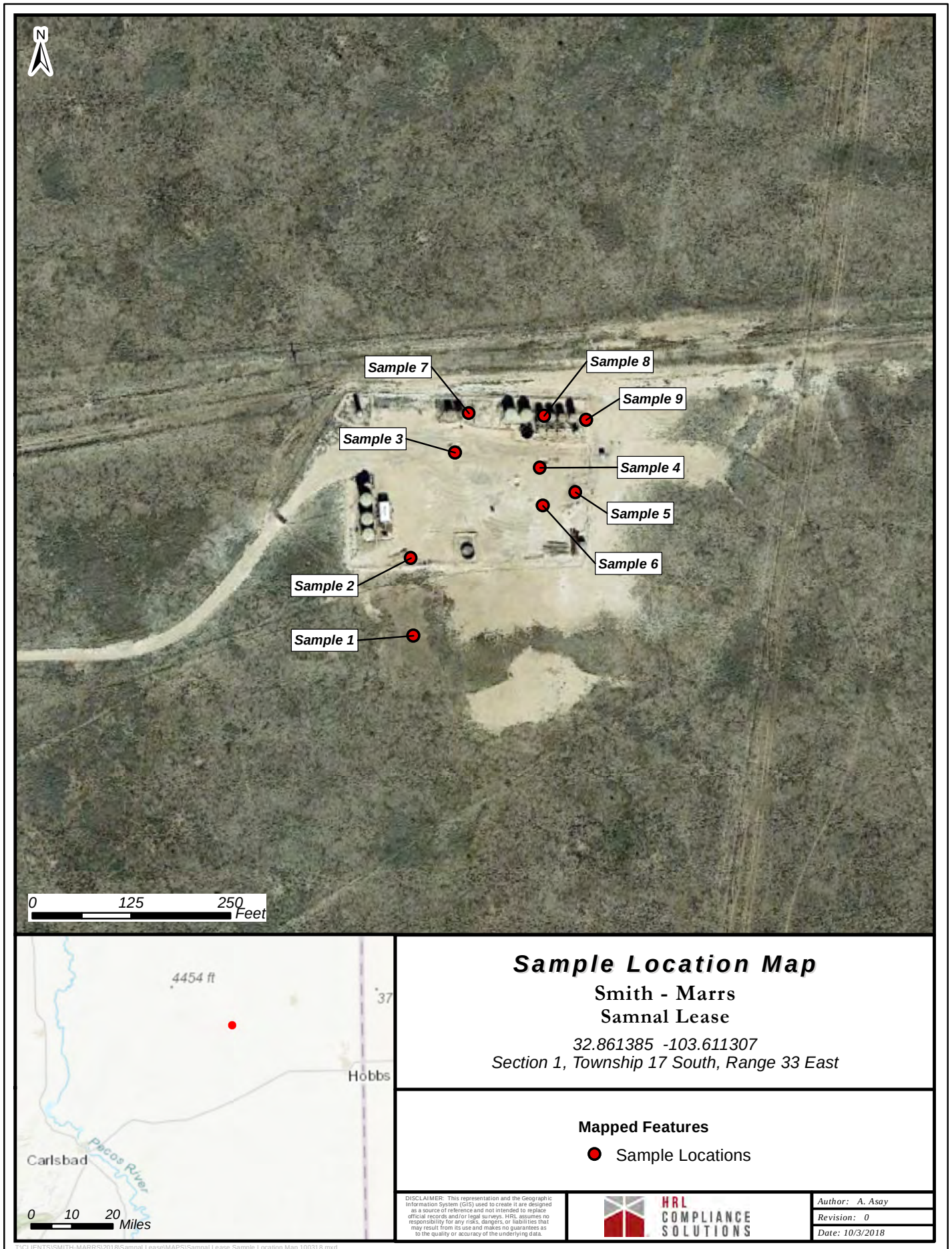
IPANM EXHIBIT 41



Attachment C:

Sample Location Map

IPANM EXHIBIT 41



IPANM 002342

IPANM EXHIBIT 41



Attachment D:

Laboratory Analytical Reports

IPANM EXHIBIT 41



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 01, 2018

LUPE CARRASCO

HRL COMPLIANCE SOLUTIONS, INC.

2385 F 1/2 ROAD

GRAND JUNCTION, CO 81505

RE: SAMNAL LEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/27/18 9:54.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A solid black rectangular box used to redact the signature of the sender.

Celey D. Keene

Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received: 09/27/2018
 Reported: 10/01/2018
 Project Name: SAMNAL LEASE
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 09/25/2018
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: S 1 - SURFACE (H802739-01)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 82.1 % 41-142

Surrogate: 1-Chlorooctadecane 77.7 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received: 09/27/2018
Reported: 10/01/2018
Project Name: SAMNAL LEASE
Project Number: NONE GIVEN
Project Location: NONE GIVEN

Sampling Date: 09/25/2018
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S 1 - 1' (H802739-02)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	09/28/2018	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 82.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 1 - 2' (H802739-03)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37		
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47		
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35		
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79		
Total BTEX	<0.300	0.300	09/27/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	09/28/2018	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 84.8 % 41-142

Surrogate: 1-Chlorooctadecane 78.5 % 37.6-147

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - SURFACE (H802739-04)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	09/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	50.7	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	48.4	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 77.0 % 41-142

Surrogate: 1-Chlorooctadecane 73.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - 1' (H802739-05)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.8 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9600	16.0	09/28/2018	ND	400	100	400	3.92	QM-07

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 87.3 % 41-142

Surrogate: 1-Chlorooctadecane 82.6 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - 2' (H802739-06)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.7 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 79.8 % 41-142

Surrogate: 1-Chlorooctadecane 75.1 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - SURFACE (H802739-07)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.1 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	38.7	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	11.6	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 72.1 % 41-142

Surrogate: 1-Chlorooctadecane 70.3 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - 1' (H802739-08)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.9 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	14.3	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 83.7 % 41-142

Surrogate: 1-Chlorooctadecane 81.7 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - 1.5' (H802739-09)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.7 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6080	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 84.4 % 41-142

Surrogate: 1-Chlorooctadecane 79.5 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 4 - SURFACE (H802739-10)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.4 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8880	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	177	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	84.3	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 82.4 % 41-142

Surrogate: 1-Chlorooctadecane 88.1 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 4 - 1' (H802739-11)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.2 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7440	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	224	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	65.1	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 83.6 % 41-142

Surrogate: 1-Chlorooctadecane 90.2 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 5 - SURFACE (H802739-12)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 83.6 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	543	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	243	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 77.7 % 41-142

Surrogate: 1-Chlorooctadecane 99.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 5 - 1' (H802739-13)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.2 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	262	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	124	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 85.3 % 41-142

Surrogate: 1-Chlorooctadecane 93.5 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 6 - SURFACE (H802739-14)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.0 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	31600	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	10.3	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 72.6 % 41-142

Surrogate: 1-Chlorooctadecane 69.5 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 6 - 1' (H802739-15)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.5 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14100	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 81.5 % 41-142

Surrogate: 1-Chlorooctadecane 76.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - SURFACE (H802739-16)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEx	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.2 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	348	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	251	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 83.6 % 41-142

Surrogate: 1-Chlorooctadecane 93.3 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - 1' (H802739-17)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.8 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	76.9	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	64.8	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 83.6 % 41-142

Surrogate: 1-Chlorooctadecane 83.9 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - 2' (H802739-18)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.2 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	194	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	123	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 85.3 % 41-142

Surrogate: 1-Chlorooctadecane 95.8 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - SURFACE (H802739-19)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEx	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.4 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/29/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	737	10.0	09/29/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	197	10.0	09/29/2018	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - 1' (H802739-20)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.9 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	12.3	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 89.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
 LUPE CARRASCO
 2385 F 1/2 ROAD
 GRAND JUNCTION CO, 81505
 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - 2' (H802739-21)

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.3 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	54.3	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	10.7	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 89.2 % 41-142

Surrogate: 1-Chlorooctadecane 89.8 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 9 - SURFACE (H802739-22)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEx	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.0 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	09/28/2018	ND	183	91.6	200	4.21		
DRO >C10-C28*	2220	50.0	09/28/2018	ND	187	93.3	200	2.47		
EXT DRO >C28-C36	722	50.0	09/28/2018	ND						

Surrogate: 1-Chlorooctane 82.5 % 41-142

Surrogate: 1-Chlorooctadecane 161 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

HRL COMPLIANCE SOLUTIONS, INC.
LUPE CARRASCO
2385 F 1/2 ROAD
GRAND JUNCTION CO, 81505
Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 9 - 1' (H802739-23)

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEx	<0.300	0.300	09/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.8 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	09/28/2018	ND	400	100	400	3.92	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	28.4	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	14.3	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 80.4 % 41-142

Surrogate: 1-Chlorooctadecane 80.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

IPANM EXHIBIT 41



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

103

BILL TO

ANALYSIS REQUEST

+ Cardinal cannot accept verbal change. Please for written change to (575) 202-2226

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

203

+ Cardinal cannot accept verbal change. Placed for written change to (575) 202-2226

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

[illegible]



Attachment D:

State Land Office Communication

IPANM EXHIBIT 41

Jennifer Knowlton

From: Mann, Ryan <rmann@slo.state.nm.us>
Sent: Thursday, October 18, 2018 11:16 AM
To: Jennifer Knowlton
Cc: Rickey Smith; Henryetta Price; Martin, Ed; Strang, Dana V.; Barnes, Will; Antillon, Andrea
Subject: RE: Sanmal Location

Hello Jennifer,

NMSLO has conducted internal discussions regarding the site characterization. NMSLO will require the off pad areas to the south and east of the well pad be addressed as well. These appear to be the result of historic releases. It is acceptable to forego additional characterization of these areas if it is excavated to 2ft below ground level, have a liner installed, clean soil placed on top, and seeded at the appropriate time. Additionally NMSLO will require a liner in the area around sample point #6. The lateral extent of this excavation will require confirmation samples.

Please let me know if you have any questions or concerns.

Ryan Mann
Remediation Specialist
Field Operation Division
(575) 392-3697
(505) 699-1989
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88240

From: Jennifer Knowlton [mailto:jknowlton@hrlcomp.com]
Sent: Friday, October 5, 2018 1:58 PM
To: Mann, Ryan <rmann@slo.state.nm.us>
Cc: Rickey Smith <rickeylynnsmith@gmail.com>; Henryetta Price <hprice@hrlcomp.com>
Subject: Sanmal Location

Ryan,

As I discussed on the phone, HRL is assisting Mr. Smith with this issue. We recently completed characterization sampling at the Sanmal location since it had been over a year since the previous sampling. A depth to water analysis shows that the water table is over 100' bgs at this location. Comparing the analytical summary table to Table 1 closure standards in NMAC19.15.29, we will need to remove about a foot of material around SP6.

I would like to request a deferral on cleaning up around SP1. I believe that this is an old drilling pit but it is starting to revegetate and it is better to not disturb the growth if possible.

I would like SLO concurrence and input on this plan before submitting the remediation plan to OCD.

If you have any questions, please do not hesitate to contact me.

Jennifer Knowlton, PE | Regional Manager-Permian
HRL Compliance Solutions, Inc.
112 S. 6th Street | Artesia, NM 88210

IPANM EXHIBIT 41

main 575.616.7398 Ex. 414 | mobile 505-238-3588

[Web](#) | [vCard](#) | [Map](#) |  



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For more information please visit <http://www.symanteccloud.com>

IPANM EXHIBIT 41

From: [Hernandez, Christina, EMNRD](#)
To: ["Jennifer Knowlton"](#); [Mann, Ryan](#)
Cc: [Rickey Smith](#); [Bobcat Production LLC](#); [adam olguin](#)
Subject: RE: Sanmal Queen Unit 1RP-4647
Date: Friday, November 2, 2018 1:42:00 PM
Attachments: [2018Oct22 Remediation Plan - Sanmal Queen Unit Full Report.pdf](#)

Dear Ms. Knowlton:

Please be advised:

- Utilization of liners now necessitates a variance submission that must include justification and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health and the environment.
- The appropriate revised C-141 form must be included when requisites are submitted. The revised C-141 form is available at: <http://www.emnrd.state.nm.us/OCD/forms.html>

The remediation plan submitted for 1RP-4647 is approved with the following conditions

1. Submit a variance request for the utilization of liners.
2. Complete delineation/remediation on the southeast off location portion as agreed with SLO.
3. Sidewall confirmation samples required for excavated areas.
4. Dated photo documentation of the remedial activities, including the proper emplacement of the liner.
5. Scaled map with the confirmation sample locations in relation to the delineation sample points.

Thanks,
Christina Hernandez
EMNRD-OCD
Environmental Specialist
1625 N. French Drive
Hobbs, NM 88240
575-393-6161 x111
Christina.Hernandez@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Jennifer Knowlton <jknowlton@hrlcomp.com>
Sent: Monday, October 22, 2018 11:06 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Hernandez, Christina, EMNRD

IPANM 002375

IPANM EXHIBIT 41

<Christina.Hernandez@state.nm.us>

Cc: Rickey Smith <rickeylynsmith@gmail.com>; Bobcat Production LLC <bobcatprd@live.com>; adam olguin <aolguin@ampartnersnm.com>

Subject: [EXT] Sanmal Queen Unit 1RP-4647

Ms. Yu and Ms. Hernandez,

On behalf of Smith and Marrs, I am attaching a remediation plan for the Sanmal Queen Unit. The original C-141 was filed on 3/21/2017 but no work plan was submitted.

The State Land Office has instructed my client on the closure requirements that the SLO is going to require on this particular location and this work plan includes those requirements.

If you have any questions on this, please feel free to call or email me.

Jennifer Knowlton, PE | Regional Manager-Permian

HRL Compliance Solutions, Inc.

112 S. 6th Street | Artesia, NM 88210

main 575.616.7398 Ex. 414 | mobile 505-238-3588

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RECEIVED

OCT 21 2009

HOBBSOC

District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Smith Emarrs, Inc	Contact	Mark Hoskins
Address	P.O. Box 863	Telephone No.	432-586-3076
Facility Name	San Juan Queen Lt	Facility Type	Battery
Surface Owner	State of NM	Mineral Owner	MMCP Leasing LTD
		Lease No.	LG3345

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	1	17S	33E					Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Brine Water	Volume of Release	150 BBLs	Volume Recovered	
Source of Release	Line	Date and Hour of Occurrence	10-11-09	Date and Hour of Discovery	10-20-09
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	Maxey Brown - OCD	Late afternoon	Early morning
By Whom?		Date and Hour			
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Leak in line - came apart

Describe Area Affected and Cleanup Action Taken.*

all brine water contained inside firewall of tank battery.
vacuum truck has been called & will remediate as needed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature: <i>Jessie Jennings</i>	ENV. ENGINEER	
Printed Name: Terri Jennings	Approved by District Supervisor: <i>Jeffrey Lebing</i>	
Title: Production Analyst	Approval Date: 10/21/09	Expiration Date: 12/21/09
E-mail Address: <i>jjennings@maypmarrs.net</i>	Conditions of Approval: DELINEATE TO CLEAN + 1. SUBMIT FINAL	Attached ☐
Date: 10-20-2009 Phone: 432-586-3076	C-141 BY 12/21/09.	IRP-09.11.2330

* Attach Additional Sheets If Necessary

FGR0930937277

IPANM 002377

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 1994
Instructions on back
Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. High Plains Petroleum Corporation 3860 Carlock Dr. Boulder, CO 80305		OGRID Number 10459
Property Code 26154		API Number 30-04530291
Property Name New Mexico State	Well No. 1	

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30N	16W		330'	FNL	1635'	FWL	San Juan

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

'Proposed Pool 1	"Proposed Pool 2
Horse shoe Gallup oil ext	

¹¹ Work Type Code IN ✓	¹² Well Type Code O ✓	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S ✓	¹⁵ Ground Level Elevation 5284 ✓
¹⁶ Multiple NO ✓	¹⁷ Proposed Depth 1350.	¹⁸ Formation Gallup	¹⁹ Contractor L & B Speed Dril.	²⁰ Spud Date 7/17/2000

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8 3/4"	7"	23#	120'	28sx.	surface
6 3/4"	4 1/2"	9.5#	1350'	125sx.*	surface
				*to be determined exactl	
				with the caliper log	

The 8 3/4" surface hole is to be drilled with spud mud. 7" surface casing is to be set @ 120' and cmt'd. to the surface. A 6 1/4" hole is to be drilled with air to the base of the Gallup Fm. with the Upper and Lower Gallup to be cored. Since the well is so shallow and the original BHP in the Horseshoe Field was only 212 psi, a Type K BOP will be used.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <u>John B. Somers</u>		OIL CONSERVATION DIVISION Approved by: <u>[Signature]</u>	
Printed name: <u>John B. Somers II</u>		Title: <u>DEPUTY OIL & GAS INSPECTOR, DIST. #5</u>	
Title: <u>President</u>		Approval Date: <u>JUL - 5 2000</u>	Expiration Date: <u>JUL - 5 2000</u>
Date: <u>6/29/2000</u>	Phone: <u>303-494-4529</u>	Conditions of Approval : Attached ☐	

IPANM EXHIBIT 42

C-101 Instructions

Measurements and dimensions are to be in feet/inches. Well locations will refer to the New Mexico Principal Meridian.

IF THIS IS AN AMENDED REPORT CHECK THE BOX LABELED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

program. Attach additional sheets if necessary.

- 23 The signature, printed name, and title of the person authorized to make this report. The date this report was signed and the telephone number to call for questions about this report.
- 1 Operator's OGRID number. If you do not have one it will be assigned and filled in by the District office.
 - 2 Operator's name and address
 - 3 API number of this well. If this is a new drill the OCD will assign the number and fill this in.
 - 4 Property code. If this is a new property the OCD will assign the number and fill it in.
 - 5 Property name that used to be called 'well name'
 - 6 The number of this well on the property.
 - 7 The surveyed location of this well New Mexico Principal Meridian NOTE: If the United States government survey designates a Lot Number for this location use that number in the 'UL or lot no.' box. Otherwise use the OCD Unit Letter.
 - 8 The proposed bottom hole location of this well at TD
 - 9 and 10 The proposed pool(s) to which this well is being drilled.
 - 11 Work type code from the following table:

N	New well
E	Re-entry
D	Drill deeper
P	Plugback
A	Add a zone
 - 12 Well type code from the following table:

O	Single oil completion
G	Single gas completion
M	Multiple completion
I	Injection well
S	SWD well
W	Water supply well
C	Carbon dioxide well
 - 13 Cable or rotary drilling code

C	Propose to cable tool drill
R	Propose to rotary drill
 - 14 Lease type code from the following table:

S	State
P	Private
 - 15 Ground level elevation above sea level
 - 16 Intend to multiple complete? Yes or No
 - 17 Proposed total depth of this well
 - 18 Geologic formation at TD
 - 19 Name of the intended drilling company if known.
 - 20 Anticipated spud date.
 - 21 Proposed hole size ID inches, proposed casing OD inches, casing weight in pounds per foot, setting depth of the casing or depth and top of liner, proposed cementing volume, and estimated top of cement
 - 22 Brief description of the proposed drilling program and BOP

IPANM EXHIBIT 42

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ APT Number 30045-30291		² Pool Code 32870	³ Pool Name Horse shoe Gallup oil ext
⁴ Property Code 10459	⁵ Property Name NEW MEXICO STATE		⁶ Well Number 1
⁷ OGRID No. 36154	⁸ Operator Name HIGH PLAINS PETROLEUM CORP.		⁹ Elevation 5284

¹⁰ Surface Location

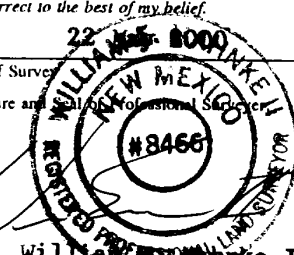
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30 N	16 W		330	North	1635	West	San Juan

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill N	¹⁴ Consolidation Code	¹⁵ Order No.
--	---	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

Fd. 9.92cu. 20.00cu. 40.00cu. 80.50cu. 80.34cu. Fd. N 0° 04' W 9.72cu. 20.00cu. 40.00cu.	Lot No. (Twp) 1 1635' 330' EAST SEC.	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature John B. Somers II Printed Name John B. Somers II Title President Date June 29, 2000	
	2 16 1635' 330' EAST SEC.		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey 22 JUL 2000 Signature and Seal of Professional Surveyor  William B. Shanks II Certificate Number 8466
	3 16 1635' 330' EAST SEC.		
	4 16 1635' 330' EAST SEC.		

New Mexico Oil Conservation Division

IPANM 002380

IPANM EXHIBIT 42

C-102 Instructions

IF THIS IS AN AMENDED REPORT, CHECK THE BOX LABELED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the appropriate OCD district office. Independent subdivision surveys will not be acceptable.

distance to the edge of the tract.) If this is a high angle or horizontal hole show that portion of the well bore that is open within this pool.

Show all lots, lot numbers, and their respective acreage.

If more than one lease has been dedicated to this completion, outline each one and identify the ownership as to both working interest and royalty.

1. The OCD assigned API number for this well
2. The pool code for this (proposed) completion
3. The pool name for this (proposed) completion
4. The property code for this (proposed) completion
5. The property name (well name) for this (proposed) completion
6. The well number for this (proposed) completion
7. Operator's OGRID number
8. The operator's name
9. The ground level elevation of this well
10. The surveyed surface location of this well measured from the section lines **NOTE: If the United States government survey designates a Lot Number for this location use that number in the 'UL or lot no.' box. Otherwise use the OCD unit letter.**
11. Proposed bottom hole location. If this is a horizontal hole indicate the location of the end of the hole.
12. The calculated acreage dedicated to this completion to the nearest hundredth of an acre
13. Put a Y if more than one completion will be sharing this same acreage or N if this is the only completion on this acreage
14. If more than one lease of different ownership has been dedicated to the well show the consolidation code from the following table:

C	Communitization
U	Unitization
F	Forced pooling
O	Other
P	Consolidation pending

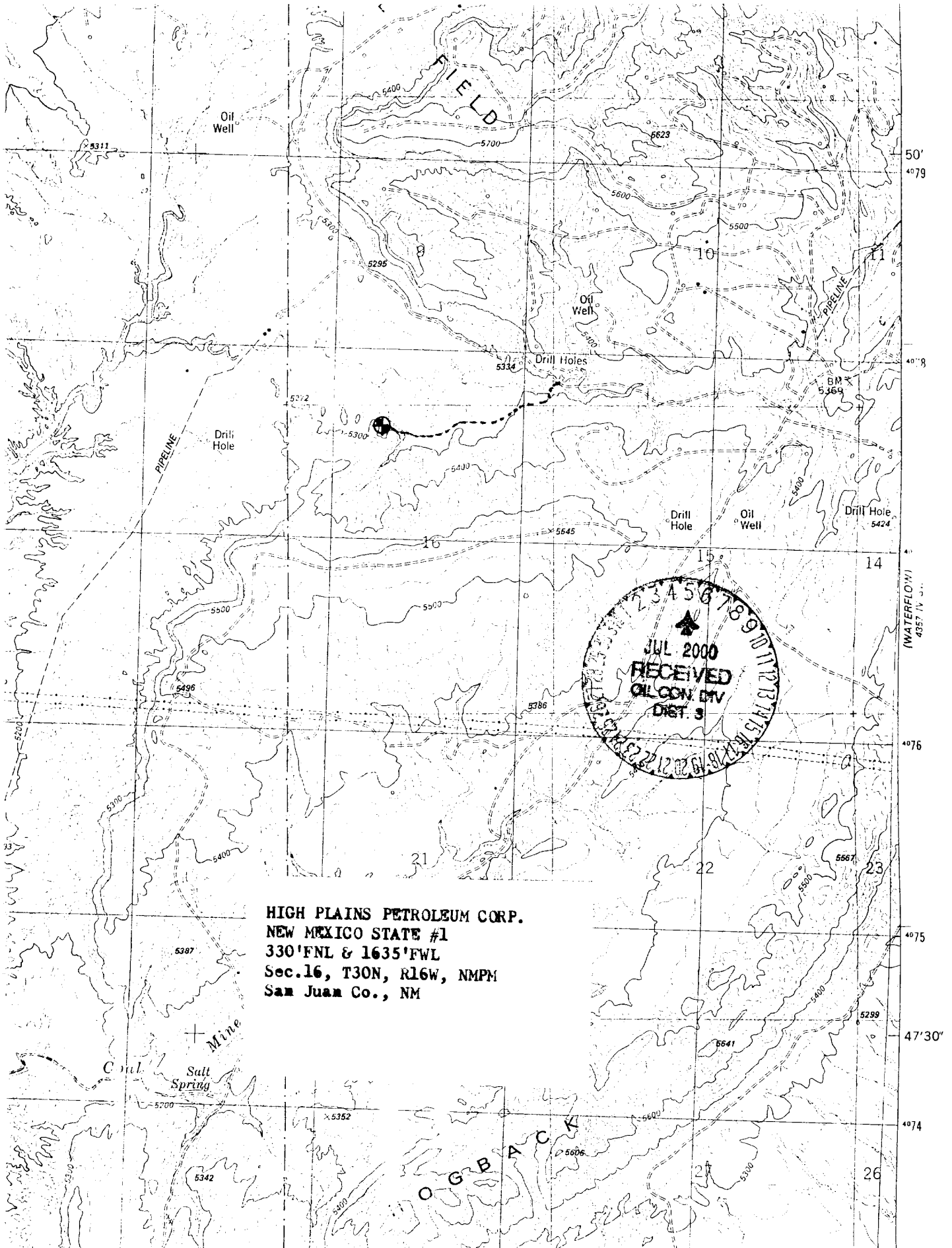
17. The signature, printed name, and title of the person authorized to make this report, and the date this document was signed.

18. The registered surveyors certification. This section does not have to be completed if this form has been previously accepted by the OCD and is being filed for a change of pool or dedicated acreage.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION!

19. Write in the OCD order(s) approving a non-standard location, non-standard spacing, or directional or horizontal drilling
10. This grid represents a standard section. You may superimpose a non-standard section over this grid. Outline the dedicated acreage and the separate leases within that dedicated acreage. Show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. (Note: A legal location is determined from the perpendicular

IPANM EXHIBIT 42



HIGH PLAINS PETROLEUM CORP.
 NEW MEXICO STATE #1
 330' FNL & 1635' FWL
 Sec. 16, T30N, R16W, NMPM
 San Juan Co., NM

IPANM EXHIBIT 42

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised March 12, 1999

Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☒ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address. High Plains Petroleum Corporation 3860 Carlock Dr. Boulder, CO 80305		² OGRID Number 10459
⁴ Property Code 26154		³ API Number 30-045-30291
⁵ Property Name New Mexico State		⁶ Well No. 1

⁷ Surface Location									
UL or lot no. C	Section 16	Township 30N	Range 16W	Lot Idn	Feet from the 330'	North/South line FNL	Feet from the 1635'	East/West line FWL	County San Juan

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
⁹ Proposed Pool 1					¹⁰ Proposed Pool 2				

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 5284'
¹⁶ Multiple No	¹⁷ Proposed Depth 1750'	¹⁸ Formation Dakota	¹⁹ Contractor L&B Speed Drill	²⁰ Spud Date 11/17/2000

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8 3/4"	7"	23#	120'	31 sx.	surface
6 1/2"	4 1/2"	9.5#	1750'	206 sx.*	surface
				*to be determined exactly by the caliper log	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

The 8 3/4" surface hole is to be drilled with spud mud. 7" surface casing is to be set @ 120' and cmtd. to the surface. A 6 1/2" hole is then to be drilled with air and foam, if necessary, through the upper two sands in the Dakota with Upper Gallup and those Dakota sands to be cored. Since the well is so shallow and is being drilled in an under-pressured area(the original Bottomhole pressure in the Horseshoe Gallup Field was only 212 psi), a Type K BOP will be used.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>John B. Somers II</i>		Approved by: <i>[Signature]</i>	
Printed name: John B. Somers II		Title: DEPUTY OIL & GAS ENGINEER	
Title: President and Petroleum Engineer		Approval Date: NOV 18 2000	
Date: 11/9/2000	Phone: 303-494-4529	Expiration Date: NOV 18 2001	
Conditions of Approval:		Attached ☐	

IPANM EXHIBIT 42

C-101 Instructions

Measurements and dimensions are to be in feet/inches. Well locations will refer to the New Mexico Principal Meridian.

IF THIS IS AN AMENDED REPORT CHECK THE BOX LABELED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

- 1 Operator's OGRID number. If you do not have one, it will be assigned and filled in by the District office.
- 2 Operator's name and address.
- 3 API number of this well. If this is a new drill the OCD will assign the number and fill this in.
- 4 Property code. If this is a new property the OCD will assign the number and fill it in.
- 5 Property name that used to be called 'well name'.
- 6 The number of this well on the property.
- 7 The surveyed location of this well New Mexico Principal Meridian. NOTE: If the United States government survey designates a Lot Number for this location use that number in the 'UL or lot no.' box. Otherwise use the OCD Unit Letter.
- 8 The proposed bottom hole location of this well at TD.
- 9 and 10 The proposed pool(s) to which this well is being drilled.
- 11 Work type code from the following table:

N	New well
E	Re-entry
D	Drill deeper
P	Plugback
A	Add a zone
- 12 Well type code from the following table:

O	Single oil completion
G	Single gas completion
M	Multiple completion
I	Injection well
S	SWD well
W	Water supply well
C	Carbon dioxide well
- 13 Cable or rotary drilling code

C	Propose to cable tool drill
R	Propose to rotary drill
- 14 Lease type code from the following table:

S	State
P	Private
- 15 Ground level elevation above sea level.
- 16 Intend to multiple complete? Yes or No. Attach intended well bore diagram.
- 17 Proposed total depth of this well.
- 18 Geologic formation at TD.
- 19 Name of the intended drilling company if known.
- 20 Anticipated spud date.
- 21 Proposed hole size ID inches, proposed casing OD inches, casing weight in pounds per foot, setting depth of the casing or depth and top of liner, proposed cementing volume, and estimated top of cement.
- 22 Brief description of the proposed drilling program and BOP program. Attach additional sheets if necessary.
- 23 The signature, printed name, and title of the person authorized to make this report. The date this report was signed and the telephone number to call for questions about this report.

IPANM EXHIBIT 42

11/16/00 THU 14:09 FAX 303 494 0879

KINKO'S BOULDER

003

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-30791	² Pool Code 97061	³ Pool Name WC 30N16W16E; Eagle Nest Dakota Wildcat
⁴ Property Code 26154	⁵ Property Name New Mexico State	
⁷ OGRID No. 10459	⁸ Operator Name High Plains Petroleum Corporation	⁶ Well Number 1 ⁹ Elevation 5284

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30N	16W		330	North	1635	West	San Juan

¹¹ Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill N	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	------------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature <u>John B. Somers II</u> Title <u>President</u> Date <u>November 16, 2000</u>	
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey <u>May 22, 2000</u> Signature and Seal of Professional Surveyer:	
	Certificate Number	

IPANM 002385

IPANM EXHIBIT 42

JICARILLA C #6
CURRENT
SEC. 27, T25N, R5W
RIO ARRIBA, NM
MESAVERDE

TODAYS DATE: 04-01-99

SHOE @ 302'

NACIMIENTO @ 750'

OJO ALAMO @ 1940'

KIRTLAND @ 2360'

FRUITLAND @ 2550'

PICTURED CLIFF @ 2772'

CLIFFHOUSE @ 4379'

MENEFEE @ 4434'

GALLUP @ 6300'

DAKOTA @ 7022'

10 3/4", 32.3# SET @ 302'
CMT W/ 250 SX, CIRCULATED

2 3/8" TO 4962'

TOC @ 2288'

8 3/4" OH

DV TOOL @ 3732'

TOC @ 4200'

CSG SQUEEZED W/ 471 SX CMT

PERFORATIONS @ 4383' - 5196'

PBTD @ 5990'
RETAINER @ 6954'

PERFORATIONS @ 7022' - 7200', SQUEEZED W/ 60 SX
BELOW AND 108 SX ABOVE RETAINER

5 1/2", 17# SET @ 7348'
CMT IN 2 STAGES W/ 800 SX

PBTD @ 7133'

IPANM 002386

IPANM EXHIBIT 42

Submit 3 Copies To Appropriate District Office

District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South First, Artesia, NM 87210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO. 30-045-30291

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
VA-2178

7. Lease Name or Unit Agreement Name:
New Mexico State

8. Well No. 1

9. Pool name or Wildcat
Horseshoe Gallup

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
Oil Well ☒ Gas Well ☐ Other

2. Name of Operator High Plains Petroleum Corporation

3. Address of Operator 3860 Carlock Dr., Boulder, CO 80305

4. Well Location
Unit Letter C : 330 feet from the North line and 1035 feet from the West line
Section 16 Township 30 N Range 16W NMPM County San Juan

10. Elevation (Show whether DR, RKB, RT, GR, etc.)
5284' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☒ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☒

OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Moved in L and B Speed Drill. Rigged up. Spudded @ 9.A.M. on 11/20/2000. Drld. 6 3/4" surface hole to 133' using native mud. Ran 3 joints of 7" 23# surface casing. Set @ 132' and cemented with 50 sx. (59 ft³) of Class H cement. Circulated cement to the surface. Plug down @ 4:30 P.M. Shut down. waiting on cement.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Petroleum Engineer & President DATE 11/28/2000

Type or print name John B. Somers II Telephone No. 303-494-4529
(This space for State use)

APPROVED BY ORIGINAL SIGNED BY CHARLES T. PERREN TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 43 DATE DEC - 1 2000
Conditions of approval, if any:

IPANM 002387



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

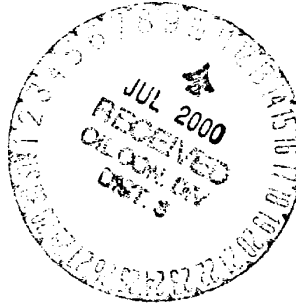
Lori Wrotenbery

Director

Oil Conservation Division

July 6, 2000

Mr. John B. Somers, II
President
High Plains Petroleum Corporation
3860 Carlock Drive
Boulder, Colorado 80305



Re: \$5,000 Single-Well Cash Bond
High Plains Petroleum Corporation, Principal – OGRID 10459
Wells Fargo Bank West, N.A. – Santa Fe – Depository
330' FNL and 1635' FWL, Section 16, Township 30 North,
Range 16 West, San Juan County, New Mexico
Bond No. OCD-677

Dear Mr. Somers:

The New Mexico Oil Conservation Division hereby approves the above-captioned single-well cash bond.

Sincerely,

A handwritten signature in black ink, appearing to read "Lyn S. Hebert".

LYN S. HEBERT

Attorney

Oil Conservation Division

*NM State #1
C-16-30-16*

LSH/dp

cc: Oil Conservation Division – Aztec, New Mexico

Wells Fargo Bank West, N.A.
1048 Paseo de Peralta
Santa Fe, NM 87505

IPANM EXHIBIT 42

L & B Speed Drill, Inc.

P.O. BOX 70 • FARMINGTON, NEW MEXICO 87499-0070 • (505) 325-1079

DATE: 12/2/2000

RECEIVED DEC 14 2000

TO: High Plains Petroleum Corporation
3860 Carlock Dr.
Denver, Co 80303

30-45-30291

Re: Directional Survey
Well Horseshoe State #1
NW/4 NE Sec. 16-T30N-R16W
San Juan County, NM

Below is the directional survey for your well Horseshoe State #1.

130' 3/4°
650' 1°
1160' 1 1/4°



ACKNOWLEDGEMENT

STATE OF NEW MEXICO]
COUNTY OF SAN JUAN]

SIGNED & ACKNOWLEDGED BY:

James L. Ludwick
JAMES L. LUDWICK, PRESIDENT

The foregoing instrument was acknowledged before me this 17th day of Dec. 2000.

John H. Hatcher
NOTARY PUBLIC

My commission expires: 10/23/2003

IPANM 002390

INSTRUCTIONS

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Northwestern New Mexico

OIL OR GAS SANDS OR ZONES

IMPORTANT WATER SANDS - None

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

IPANM 002391

IPANM EXHIBIT 42

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-104
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies
☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address High Plains Petroleum Corporation 3880 Carlock Dr. Boulder, CO 80305		² OGRID Number 10459
		³ Reason for Filing Code NW
⁴ API Number 30-045-30291	⁵ Pool Name Horseshoe Gallup	⁶ Pool Code 32870
⁷ Property Code 26154	⁸ Property Name New Mexico State	⁹ Well Number 1

¹² Loc Code S	¹³ Producing Method Code P	¹⁴ Gas Connection Date N/A	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
-----------------------------	--	--	-----------------------------------	------------------------------------	-------------------------------------

II. 10 Surface Location

UL or lot no. C	Section 16	Township 30N	Range 16W	Lot Idn	Feet from the 330	North/South Line	Feet from the 1635	East/West line	County San Juan
--------------------	---------------	-----------------	--------------	---------	----------------------	------------------	-----------------------	----------------	--------------------

11 Bottom Hole Location

UL or lot no. C	Section 16	Township 30N	Range 16W	Lot Idn	Feet from the 330	North/South line	Feet from the 1635	East/West line	County San Juan
--------------------	---------------	-----------------	--------------	---------	----------------------	------------------	-----------------------	----------------	--------------------

III. Oil and Gas Transporters

¹⁸ Transporter OGRID 009018	¹⁹ Transporter Name and Address Giant Ref Co.	²⁰ POD 2828160	²¹ O/G O	²² POD ULSTR Location and Description

IV. Produced Water

²³ POD 2828161	²⁴ POD ULSTR Location and Description
------------------------------	--

V. Well Completion Data 15

²⁵ Spud Date 11/20/2000	²⁶ Ready Date 3/15/2001	²⁷ TD 1160'	²⁸ PBTD 1134	²⁹ Perforations 1091-1109	³⁰ DHC, DC, MC
³¹ Hole Size 8 3/4"	³² Casing & Tubing Size 7" 23#	³³ Depth Set 132	³⁴ Sacks Cement 50		
6 1/4"	4 1/2" 9.5#	1160	65		
2"	2 3/8"	1086			

VI. Well Test Data

³⁵ Date New Oil 2/27/2001	³⁶ Gas Delivery Date N/A	³⁷ Test Date 3/15/2001	³⁸ Test Length 15 1/2 hrs	³⁹ Tbg. Pressure N/A	⁴⁰ Csg. Pressure 20 psi
⁴¹ Choke Size N/A	⁴² Oil 20	⁴³ Water 56	⁴⁴ Gas TSTM	⁴⁵ AOF N/A	⁴⁶ Test Method P

⁴⁷ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: John B. Somers II

Printed name: John B. Somers II

Title: Petroleum Engineer and President

Date: March 16, 2001 Phone: 303-494-4529

OIL CONSERVATION DIVISION

Approved by: 378
SUPERVISOR DISTRICT #3

Title:

Approval Date: MAR 19 2001

⁴⁸ If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature

Printed Name

Title

Date

IPANM EXHIBIT 42

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources
OIL CONSERVATION DIVISION
 MAR 20 2001
 200 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 Revised March 25, 1999

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-30291
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator High Plains Petroleum Corporation		6. State Oil & Gas Lease No. VA-2178
3. Address of Operator 3800 Carlock Dr., Boulder, CO 80305		7. Lease Name or Unit Agreement Name: New Mexico State
4. Well Location Unit Letter C : 330 feet from the North line and 1635 feet from the West line Section 16 Township 30N , Range 16W NMPM County San Juan		8. Well No. 1
10. Elevation (Show whether DR, RKB, RT, GR, etc.) 5284 GR		9. Pool name or Wildcat Horseshoe Gallup

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐ OTHER: ☐	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐ CASING TEST AND CEMENT JOB ☐ OTHER: Running production csg. ☒

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

11/24/2000 Ran a float shoe, 1 qt. of 4 1/2" 9.5# csg, FC, 9 qts of 4 1/2" 9.5# csg, ECP, DV tool and 16 qts of 4 1/2" 9.5# csg, set @ 1160' and cmt'd. w/ 15 sx. CL. H containing 290 CaCl₂ in stage one and 50 sx. CL H containing sodium metasilicate in stage two, cmtg. the prod. csg. to the surface.
 Press Test csg 500 # held for 30 mins.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Petroleum Engineer + Pres. DATE 3/19/2001

Type or print name John B. Somers II Telephone No. 303-494-4529

(This space for State use)

APPROVED BY _____ TITLE DEPUTY OIL & GAS INSPECTOR DIST. #3 DATE MAR 20 2001
 Conditions of approval, if any:

IPANM EXHIBIT 42

Submit To Appropriate District Office
 State Lease - 6 copies
 Fee Lease - 5 copies
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 1301 W. Grand Avenue, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Oil Conservation Division
 1220 South St. Francis Dr. 2001
 Santa Fe, NM 87505

Form C-105
 Revised March 25, 1999

WELL COMPLETION OR RECOMPLETION REPORT AND LOG				WELL API NO. 30-045-30291	
1a. Type of Well: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐				5. Indicate Type of Lease STATE ☒ FEE ☐	
b. Type of Completion: NEW ☐ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF. ☐ OVER ☐ BACK ☐				State Oil & Gas Lease No. VA-2178	
2. Name of Operator High Plains Petroleum Corporation				7. Lease Name or Unit Agreement Name New Mexico State	
3. Address of Operator 3860 Carlock Dr., Boulder, CO 80305				8. Well No.	
4. Well Location Unit Letter C 330 Feet From The North Line and 1635 Feet From The West Line				9. Pool name or Well Unit Undeater #1 West Manco	
10. Date Spudded 11/20/2000		11. Date T.D. Reached 11/24/2000		12. Date Compl. (Ready to Prod.) 3/14/2001/0120	
13. Elevations (DF & RKB, RT, GR, etc.) 5284 GR		14. Elev. Casinghead 5284		15. Total Depth 1160	
16. Plug Back T.D. 1133'		17. If Multiple Compl. How Many Zones? Two		18. Intervals Drilled By 0-1160	
19. Producing Interval(s), of this completion - Top, Bottom, Name 764'-1000' Mancoos and 1054'-1109' Upper Gallup Sandstone				20. Was Directional Survey Made Yes	
21. Type Electric and Other Logs Run Induction, GR, SP, Neutron, Density, and Gmt. Bond				22. Was Well Cored	
23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	23	132'	8 5/8"	50%	None
4 1/2"	9.5	1160'	6 1/4"	65%	None
24. LINER RECORD					
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	PACKER SET
				2 3/8"	1086
25. TUBING RECORD					
26. Perforation record (interval, size, and number)			27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.		
764-70', 781-83' and 839-46' w/ 8-34 gm jet			DEPTH INTERVAL		
865-75' w/ 6-34 gm jet and 998-1000'			AMOUNT AND KIND MATERIAL USED		
1046-54' and 1054-82' w/ 4-34 gm jet			1091-1109 1413 Bbls. wt and 118,800 lbs		
1091-93', 1100-02', 1104-06 and 1107-09' w/ 2-34 gm jet			20-40 3/8"		
28. PRODUCTION					
Date First Production 10/13/2001		Production Method (Flowing, gas lift, pumping - Size and type pump) Pumping		Well Status (Prod. or Shut-in) Producing	
Date of Test 10/13/2001	Hours Tested 24	Choke Size N/A	Prod'n For Test Period	Oil - Bbl 52	Gas - MCF TSTM
Flow Tubing Press. N/A	Casing Pressure 20	Calculated 24-Hour Rate	Oil - Bbl 52	Gas - MCF TSTM	Water - Bbl 1
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Used for fuel				Test Witnessed By John Somers	
30. List Attachments					
31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief					
Printed Name John B. Somers				Title and President	
Signature				Date 10/15/2001	

INSTRUCTIONS

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Northwestern New Mexico

T. Penn
T. Penn
T. Leadville
T. Madison
T. Elbert
T. McCracken
T. Ignacio
T. Granite
T.
T.
T.
T.
T.
T.
T.
T.

No. 3, from to
No. 4, from to

No. 1, from to feet
No. 2, from to feet
No. 3, from to feet

IPANM 002395



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

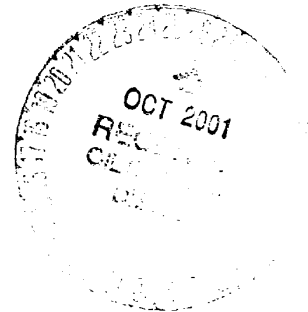
Oil Conservation Division

ADMINISTRATIVE ORDER DHC-2964

High Plains Petroleum Corporation
3860 Carlock Drive
Boulder, Colorado 80305

Attention: Mr. John B. Somers II

*New Mexico State No. 1
API No. 30-045-30291
Unit C, Section 16, Township 30 North, Range 16 West, NMPM,
San Juan County, New Mexico.
Eagle Nest Mancos (Oil – 97138) and
Horseshoe Gallup (Oil – 32870) Pools*



Dear Mr. Somers:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303.C.(1), each of the commingled pools shall be allowed to produce up to the top oil allowable and top casinghead gas allowable applicable for that pool.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Eagle Nest Mancos Pool	Oil-90%	Gas-0%
Horseshoe Gallup Pool	Oil-10%	Gas-0%

IPANM EXHIBIT 42

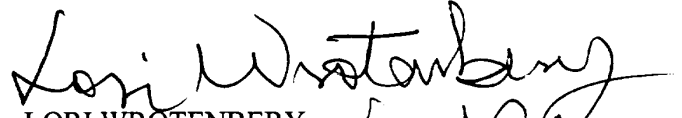
*Administrative Order DHC-2964
High Plains Petroleum Corporation
October 19, 2001
Page 2*

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of commingling operations.

Pursuant to Rule 303.C.(2), the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 19th day of October 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director

by [Signature]

S E A L

LW/RE

cc: Oil Conservation Division - Aztec /
New Mexico State Land Office- Oil and Minerals Division

IPANM EXHIBIT 42

to Appropriate
District Office

ogy. Minerals and Natural Resources Department

Form C-108
Revised 1-1-89

DISTRICT I
P.O. Box 1960

DISTRICT II
P.O. Drawer DC, Azusa, NM 88210

DISTRICT III
1000 Rio Grande Rd., Azusa, NM 87410

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO.
30-045-30291

3. Indicate Type of Lease
STATE ☒ FEE ☐

4. State Oil & Gas Lease No.
VA-2178

7. Lease Name or Unit Agreement Name

New Mexico State

8. Well No.
1

9. Pool name or Wildcat
Eagle Nest and Horseshoe

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. Name of Operator
High Plains Petroleum Corporation

3. Address of Operator
3860 Carlock Dr., Boulder, CO 80305

4. Well Location
Unit Letter C : 330 Feet From The North Line and 1635 Feet From The West Line

Section 16 Township 30 North Range 16 West NMPM San Juan County

10. Elevation (Show whether DP, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER: ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING TEST AND CEMENT JOB ☐
OTHER: Recompletion ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

9/3/2001 Set ret. BP @ 1078'. PFD 1054-62' and 1046-54' w/ 4-34 gm jpf, 998-1000' w/ 4-34 gm jpf, 865-75' w/ 6-34 gm jpf and 781-83' and 764-70' w/ 8-34 gm jpf.

10/11/2001 Pulled ret. BP after reversing 9 feet of pftg. trash off the top

10/12/2001 Ran 33 jts (1086') 2 3/8" tbg, and set @ 1086', after CO fixed 1114-34'.

10/13/2001 Ran pump and rods and put on the pump

10/14/2001 Produced 52 BBL BW in the first 24 hrs

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Petroleum Engineer and President DATE 10/15/2001

TYPE OR PRINT NAME John B. Somers II TELEPHONE NO.

(This space for State Use)

Original Signed by STEVEN N. HAYDEN

DEPUTY OIL & GAS INSPECTOR, DIST. 5

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

IPANM EXHIBIT 42

District I
(1625 N. French Street, Hobbs, NM 88240)

District II

611 South First Street, Artesia, NM 88210

District III

1000 West Plains Road, Alamogordo, NM 88310

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-107A
Revised May 15, 2000

APPLICATION TYPE

☒ Single Well

☐ Establish Pre-Approved Pools

EXISTING WELLBORE

☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

High Plains Petroleum Corp. 3860 Carroll Dr., Boulder, CO 80305

Operator

Address

New Mexico State #1 C-16-30N16W

San Juan

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 10459 Property Code 26154 API No. 30-045-30291 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Eagle Nest Monacos		Horseshoe Gallup
Pool Code	97138		32870
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	764 - 1054' PFs		PFs 1054 - 1109'
Method of Production (Flowing or Artificial Lift)	Pumping		Pumping
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	42°		40.3°
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicants shall be required to attach production estimates and supporting data.)	Date: 10/13/2001 Rates: 47 BO	Date: Rates:	Date: 8/29/2001 Rates: 5 BO 1 BW
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 90 % Gas 0 %	Oil % Gas %	Oil 10 % Gas 0 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐
Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other?

Yes ☒ No ☐

Will commingling decrease the value of production?

Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?

Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Petroleum Engineer and President DATE Oct. 16, 2001

TYPE OR PRINT NAME John B. Somers II TELEPHONE NO. (303) 494-4529

IPANM EXHIBIT 42

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-30791	² Pool Code	³ Pool Name Eagle Nest Dakota Wildcat
⁴ Property Code 26154	⁵ Property Name New Mexico State	⁶ Well Number 1
⁷ OGRID No. 10459	⁸ Operator Name High Plains Petroleum Corporation	⁹ Elevation 5284

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30N	16W		330	North	1635	West	San Juan

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill N	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	------------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 ← 1635' → 330' Dedicated Acreage OCT 2001 RECEIVED OIL CON. DIV DIST. 3	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>John B. Somers II</i> Signature John B. Somers II President Title Date November 16, 2000
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. May 22, 2000 Date of Survey Signature and Seal of Professional Surveyer:
	Certificate Number

IPANM 002400

IPANM EXHIBIT 42

District I
1625 N. French Dr., Hobbs, NM 88240

District II
911 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-30791	² Pool Code 97138	³ Pool Name Eagle Nest Mancos
⁴ Property Code 26154	⁵ Property Name New Mexico State	⁶ Well Number 1
⁷ OGRID No. 10459	⁸ Operator Name High Plains Petroleum Corporation	⁹ Elevation 5284

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30N	16W		330	North	1635	West	San Juan

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. John B. Somers II President Date: October 12, 2001	
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: May 23, 2000 Signature and Seal of Professional Surveyor:	
	Certificate Number	



High Plains Petroleum Corporation

3860 Carlock Dr. Boulder, CO 80305 303-494-4529

Explanation
Application for Downhole Commingling
New Mexico State #1
NE/4NW/4 Sec. 16, T30N, R16W, NMPM
San Juan County, New Mexico

A production curve for each zone for at least one year is not available, because production from the Gallup zone commenced in March, 2001, declined to just 5 BOPD in July, 2001 and the well was recompleted in the Mancos zone on September 3, 2001 with the retrievable bridge plug removed on October 11, 2001. During the period from September 3rd to October 11th, production appeared to be leaking past the retrievable bridge plug into the Gallup Zone, so the plug was pulled and the two zones commingled. A copy of the Ongard record of production from the Gallup is attached in lieu of a production curve.

No production history is available for the Mancos, so the Mancos rate has been estimated as 2 BO/hr., based on the flow from the Mancos during drilling. A copy of the part of the mud log showing that estimated rate is attached, and the rate has been highlighted green.

A copy of High Plains' letter notifying the Commissioner of Public Lands of our intention to apply for permission to commingle the Gallup and Mancos is attached.

Royalty, overriding royalty and working interests are common to both zones.

Commingling of production from both zones may justify the development and recovery of oil that cannot be justified individually. Therefore, commingling is likely to promote the recovery of oil that might otherwise be uneconomic to recover, and it will best serve the purpose of conservation of the State of New Mexico's resources.

IPANM EXHIBIT 42

Page: 1 Document Name: untitled

CMD : ONGARD 10/16/01 14:31:5
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOIV -TPM
Page No: 1

OGRID Identifier : 10459 HIGH PLAINS PETROLEUM CORP
Pool Identifier : 32870 HORSESHOE GALLUP
API Well No : 30 45 30291 Report Period - From : 01 2001 To : 10 2001

API Well No	Property Name	Prod. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Sta
30 45 30291		03 01 16	1307	295 P
30 45 30291	NEW MEXICO STATE	04 01 29	735	360 P
30 45 30291	NEW MEXICO STATE	05 01 31	273	258 P
30 45 30291	NEW MEXICO STATE	06 01 30	193	162 P
30 45 30291	NEW MEXICO STATE	07 01 31	155	90 P

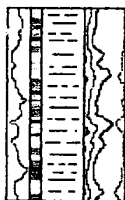
Reporting Period Total (Gas, Oil) : 2663 1165

M0025: Enter PF keys to scroll

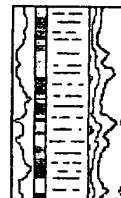
PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

Date: 10/16/2001 Time: 02:45:41 PM

IPANM 002403

SOFTROCK GEOLOGICAL SERVICES, INC.

(970) 247- 8868 fax 247- 5108



Well Name: New Mexico State #1
Location: Section 16 T30N R16W
Licence Number:
Spud Date: 11-20-00
Surface Coordinates: 330' FNL
1635' FWL

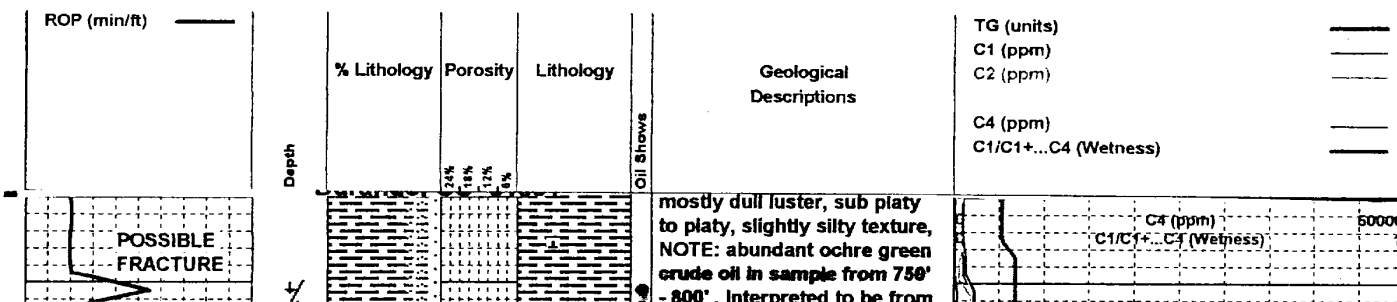
Region: San Jaun Co., NM
Drilling Completed: 11-24-00

**Bottom Hole
Coordinates:**

Ground Elevation (ft):	5284'	K.B. Elevation (ft):	5288'
Logged Interval (ft):	140' To: 1160'	Total Depth (ft):	1160'
Formation:	Mancos - Dakota		
Type of Drilling Fluid:	H2O / Air		

Printed by MUD.LOG from WellSight Systems Inc. 1-800-447-1534 www.wellsight.com

Company: High Plains Petroleum
Address: 3860 Carlock Drive
Boulder, CO 80305
303 - 494 - 4529



IPANM EXHIBIT 42



High Plains Petroleum Corporation

3860 Carlock Dr. Boulder, CO 80305 303-494-4529

October 15, 2001

Commissioner of Public Lands
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Application
Downhole Comingling
New Mexico State #1
Section 16, T30N, R16W, NMPM
San Juan County, New Mexico
Lease No. VA-2178

Dear Sir,

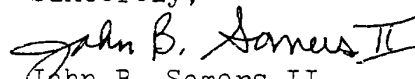
The purpose of this letter is to notify you that High Plains is applying to the Oil Conservation Division (OCD) for permission to comingling oil production from the Gallup Sandstone and the contiguous Mancos Shale in New Mexico State #1. The well is located on a state lease, Lease No. VA-2178, which covers 458 acres of state land in Section 16, Township 30 North, Range 16 West, NMPM in San Juan County, New Mexico.

In March of this year, the well was completed in the Horseshoe Gallup Pool. Production declined to only 5 BOPD in August, so the well was recompleted in the Mancos, which flowed oil when the well was drilled last November. After that recompletion, the two zones are producing 52 BOPD, which may be enough to justify further development, if the additional production from the fractures and siltstones in the Mancos doesn't decline too rapidly.

Production from the Mancos in this well represents the discovery of a new Mancos pool, which has been named Eagle Nest Mancos, because the well is along Eagle Nest Arroyo. The production is shallow, only 772 feet to the fracture that flowed the first oil, so the pressure is low.

Nearest Mancos production was about 3 miles to the northeast in the Verde Field. That field also overlaid the southeast end of the Horseshoe Gallup Field, and production from the same two producing zones has been comingled since the 1950's when the Horseshoe and Verde Fields were discovered. Therefore, this is a routine administrative matter from which the state will benefit.

Sincerely,


John B. Somers II
President
High Plains Petroleum

IPANM EXHIBIT 42



High Plains Petroleum Corporation

3860 Carlock Dr. Boulder, CO 80305 303-494-4529

October 16, 2001

Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, New Mexico

Attention: Mr. David Catanach



Re: Form C107A
Application
Downhole Commingling
New Mexico State #1
Sec. 16, T30N, R16W, NMPM
San Juan County, New Mexico
Lease No. VA-2178

Dear Mr. Catanach,

Attached please find a completed Form C107A applying for downhole commingling of oil from the Gallup and Mancos Zones in High Plains' New Mexico State #1 well. The well is presently completed in the Upper Gallup Sandstone in the Horseshoe Gallup Field and the fractured Mancos Shale in the newly created Eagle Nest Mancos Field. Steve Hayden in Aztec said that you handle applications so that's why this letter is directed to you.

Prompt approval of this application would be appreciated as it has been almost a year since the well was drilled, and the working interest owners are anxious to begin recovering some of the considerable investment that they've made in drilling, completing, equipping and testing this well. Several lengthy delays have occurred as a result of the shortage of completion rigs in the San Juan Basin, so your understanding and cooperation in this matter would be appreciated very much.

Sincerely,

John Somers

John Somers
High Plains Petroleum

Attachments

cc: Aztec District Office

Working Interest Owners

IPANM 002406

IPANM EXHIBIT 42

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-104
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address High Plains Petroleum Corporation 3800 Carlock Dr. Boulder, CO 80305		² OGRID Number 10459
		³ Reason for Filing Code RC
⁴ API Number 30-045-30291	⁵ Pool Name Eagle Nest Mancos	⁶ Pool Code 97138
⁷ Property Code 26154	⁸ Property Name New Mexico State	⁹ Well Number 1

¹² Loc Code S	¹³ Producing Method Code P	¹⁴ Gas Connection Date N/A	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
-----------------------------	--	--	-----------------------------------	------------------------------------	-------------------------------------

II. 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
C	16	30N	16W		330		1635		San Juan

11 Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
C	16	30N	16W		330		1635		San Juan

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
009018	Giant Rfg. Co.	2828160	0	

IV. Produced Water

²³ POD	²⁴ POD ULSTR Location and Description
2828161	

V. Well Completion Data

²⁵ Spud Date	²⁶ Ready Date	²⁷ TD	²⁸ FBTD	²⁹ Perforations	³⁰ DHC, DC, MC
11/20/2000	10/12/2001	1160	1133	764-1109	
³¹ Hole Size	³² Casing & Tubing Size	³³ Depth Set	³⁴ Sacks Cement		
8 3/4"	7"	132	50		
6 1/4"	4 1/2"	1160	65		
	2 3/8"	1086			

VI. Well Test Data

³⁵ Date New Oil	³⁶ Gas Delivery Date	³⁷ Test Date	³⁸ Test Length	³⁹ Tbg. Pressure	⁴⁰ Cas. Pressure
10/12/2001	N/A	10/13/2001	24 hrs.	N/A	20
⁴¹ Choke Size	⁴² Oil	⁴³ Water	⁴⁴ Gas	⁴⁵ AOF	⁴⁶ Test Method
N/A	52	1	TSTM	N/A	P

⁴⁷ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: John B. Somers II
Printed name: John B. Somers II
Title: Petroleum Engineer and President
Date: Oct. 15, 2001 Phone: 303-494-4529

OIL CONSERVATION DIVISION
Original Signed by STEVEN N. HAYDEN
Approved by: DEPUTY OIL & GAS INSPECTOR, DIST. 9
Approval Date: OCT 15 2001

⁴⁸ If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date

IPANM EXHIBIT 42

District I

1625 N. French, Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-30791		2 Pool Code 97138		3 Pool Name Eagle Nest Mancos	
4 Property Code 26154		5 Property Name New Mexico State			6 Well Number 1
7 OGRID No. 10459		8 Operator Name High Plains Petroleum Corporation			9 Elevation 5284

10 Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	30N	16W		330	North	1635	West	San Juan

11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 ← 1635' → 330' Dedicated Acreage				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>John B. Somers II</i> John B. Somers II Printed Name President Title October 12, 2001 Date			
				18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. May 23, 2000 Date of Survey Signature and Seal of Professional Surveyor: Certificate Number			

IPANM EXHIBIT 42

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NM 87410
(505) 334-6178 FAX: (505) 334-6170
<http://nemr.state.nm.us/ocd/DistrictII/3/district.htm>

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test 5-18-03 Operator HIGH PLAINS PETROLEUM API #30-0 45-30291
Property Name NEW MEXICO STATE Well No. 1 Location: Unit C Section 16 Township 30N Range 16W
Pressure (Shut-In or Producing) _____ Tubing 0psi Intermediate _____ Casing 2psi Bradenhead 0psi

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES:			BRADENHEAD	INTERMEDIATE
	INTERMEDIATE	CASING		FLOWED	FLOWED
5 minutes		<u>2 psi</u>	Steady Flow		
10 minutes		<u>2 psi</u>	Surges		
15 minutes		<u>2 psi</u>	Down to Nothing		
20 minutes			Nothing	<u>X</u>	
25 minutes			Gas		
30 minutes			Gas & Water		
			Water		

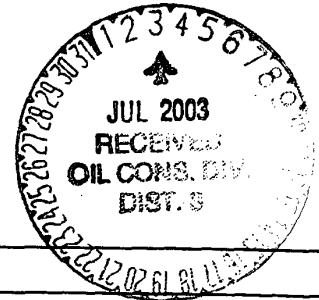
If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN _____ BRADENHEAD _____ INTERMEDIATE _____

REMARKS:

Braden Head Did nothing



By TOBY PURVIS Witness _____

(Position)

IPANM 002409

IPANM EXHIBIT 42



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6176 FAX: (505) 334-6170
<http://smrwd.state.nm.us/ocd/District/D7/district.htm>

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 10-12-09 Operator High Plains Petroleum Corp. API #30-045-30291

Property Name New Mexico State #1 Well No. 1 Location: Unit C Section 16 Township 3N Range 6W

Well Status (Shut-In or Producing) Initial PSI: Tubing 0 Intermediate NA Casing 2 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE			INTERM		
	BH	Int	Csg	Int	Csg	
TIME						
5 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	
10 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	
15 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	
20 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	
25 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	
30 min	<u>0</u>	<u>NA</u>	<u>2</u>	<u>NA</u>	<u>/</u>	

FLOW CHARACTERISTICS	
BRADENHEAD	INTERMEDIATE
Steady Flow	
Surges	
Down to Nothing	
Nothing	
Gas	
Gas & Water	
Water	

ROUND OCT 20 '09
OIL CONS. DIV.

If bradenhead flowed water, check all of the descriptions that apply below:

DIST. 3

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN PRESSURE

BRADENHEAD 0

INTERMEDIATE NA

REMARKS:

bradenhead Had no ps2 or Flowed anything
well is producing but was shut in prior to & during
bradenhead test

By Toby Purvis
Purvis
(Position)

Witness NONE

E-mail address: tspurvis@msn.com
505-486-0506

IPANM EXHIBIT 42



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1900 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6176 FAX: (505) 334-6170
[http://femnr.state.nm.us/ocd/District III3district.htm](http://femnr.state.nm.us/ocd/District%20III3district.htm)

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 04-01-12 Operator High Plains Petroleum API #30-0 45-30291

Property Name NM, STATE Well No. 1 Location: Unit C Section 16 Township 30N Range 16W

Well Status (Shut-In or Producing) Initial PSI: Tubing Ø Intermediate NA Casing Y2 Bradenhead Ø

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing TIME	PRESSURE Bradenhead			INTERM	
	BH	Int	Csg	Int	Csg
5 min	Ø	NA	Y2	NA	/
10 min	Ø	NA	Y2	NA	/
15 min	Ø	NA	Y2	NA	/
20 min	Ø	NA	Y2	NA	/
25 min	Ø	NA	Y2	NA	/
30 min	Ø	NA	Y2	NA	/

	FLOW CHARACTERISTICS	
	BRADENHEAD	INTERMEDIATE
Steady Flow		
Surges		
Down to Nothing		
Nothing		
Gas		
Gas & Water		
Water		

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN PRESSURE BRADENHEAD Ø INTERMEDIATE NA

REMARKS:

Bradenhead Had no pressure & Flowed nothing
well is producing but was shut in 48 hrs. prior to test

By Toby Purvis

Witness None

Pumper
(Position)

E-mail address tpurvis@msn.com
505-486-0506

RCVD APR 20 '12
OIL CONS. DIV.

DIST. 3



IPANM EXHIBIT 42

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
[http://emnr.state.nm.us/ocd/District III/3district.htm](http://emnr.state.nm.us/ocd/District%20III/3district.htm)

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 4-3-15 Operator High Plains API #30-0 45-30291
Property Name New Mexico State Well No. 1 Location: Unit C Section 16 Township 30 Range 16
Well Status (Shut-In or Producing) Initial PSI: Tubing 0 Intermediate N/A Casing .2 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE			INTERM	
	Bradenhead				
	BH	Int	Csg	Int	Csg
TIME					
5 min	<u>0</u>		<u>0</u>		
10 min	<u>0</u>		<u>0</u>		
15 min	<u>0</u>		<u>0</u>		
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	
BRADENHEAD	INTERMEDIATE
Steady Flow	
Surges	
Down to Nothing	
Nothing	
Gas	
Gas & Water	
Water	

OIL CONS. DIV DIST. 3

APR 03 2015

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN PRESSURE

BRADENHEAD 0

INTERMEDIATE N/A

REMARKS:

Nothing when opened.

By

[Signature]

(Position)

Witness

[Signature]

E-mail address _____

IPANM 002412

IPANM EXHIBIT 42



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
[http://emnr.state.nm.us/ocd/District III/district.htm](http://emnr.state.nm.us/ocd/District%20III/district.htm)

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 5-31-18 Operator Hight Plains Petro. API #30-045-30291

Property Name Am State Well No. 1 Location: Unit C Section 16 Township 30 Range 16

Well Status (Shut-In or Producing) Initial PSI: Tubing 10 Intermediate NA Casing 0 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE			INTERM	
	BH	Int	Csg	Int	Csg
TIME					
5 min	<u>0</u>		<u>0</u>		
10 min	<u>0</u>		<u>0</u>		
15 min	<u>0</u>		<u>0</u>		
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	
BRADENHEAD	INTERMEDIATE
Steady Flow	
Surges	
Down to Nothing	<u>✓</u>
Nothing	
Gas	<u>✓</u>
Gas & Water	
Water	

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR FRESH SALTY SULFUR BLACK

5 MINUTE SHUT-IN PRESSURE

BRADENHEAD 0

INTERMEDIATE NA

REMARKS:

Light puff when opened. Nothing when
opened after 5 min shut in

By

[Signature]

(Position)

Witness

[Signature]

E-mail address

IPANM EXHIBIT 42

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Page 1 of 6

Form C-105

Revised July 18, 2013

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit a Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-30291
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator High Plains Petroleum Corporation		6. State Oil & Gas Lease No. VA-2178
3. Address of Operator 3860 Carlock Drive, Boulder, CO 80305-6511		7. Lease Name or Unit Agreement Name New Mexico State
4. Well Location Unit Letter <u>C</u> : <u>330</u> feet from the <u>North</u> line and <u>1635</u> feet from the <u>West</u> line Section <u>16</u> Township <u>30N</u> Range <u>16W</u> NMPM, San Juan County		8. Well Number <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5284 GR		9. OGRID Number <u>10459</u>
10. Pool name or Wildcat Eagle Nest and Horseshoe		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Proposed plugging procedure:

Pull rods and pump
 Swab oil and water to Tank No. 7769
 Flush oil and water from the well into Tank No. 7769
 Plug by A-Plus Well Service as follows:
 Set a Class G cmt. plug from 1109' up to 1004' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 714' up to 614' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 182' to the surface
 Install a steel marker w/ required information shown

Rig estimated to be available June 15, 2021.

A Current Wellbore Schematic and a Proposed Wellbore Schematic accompany this form.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Pet. Engineer & President DATE 5/13/2021

Type or print name John B. Somers II E-mail address: HPBoulder@yahoo.com PHONE: 720-335-1662

For State Use Only

APPROVED BY: Brandon Powell TITLE DATE 5/18/2021

Conditions of Approval (if any):

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Page 2 of 6

Preliminary OCD Plugging Procedure
New Mexico State #1 *
NE/4NW/4 Sec. 16, T30N, R16W
San Juan County, New Mexico

- (1) Pull rods and pump
- (2) Swab oil to Tank No. 7769
- (3) Plug as follows:
 - (a) 1109' up to 1004' w/ 50% excess
 - (b) WOC and then tag
 - (c) 714' up to 614' w/ 50% excess
 - (d) WOC and then tag
 - (e) 182' to surface
- (4) Abandon with erection of a steel marker showing High Plains Pet. as operator, New Mexico State #1, Unit Letter C, Sec. 16, T30N, R16N

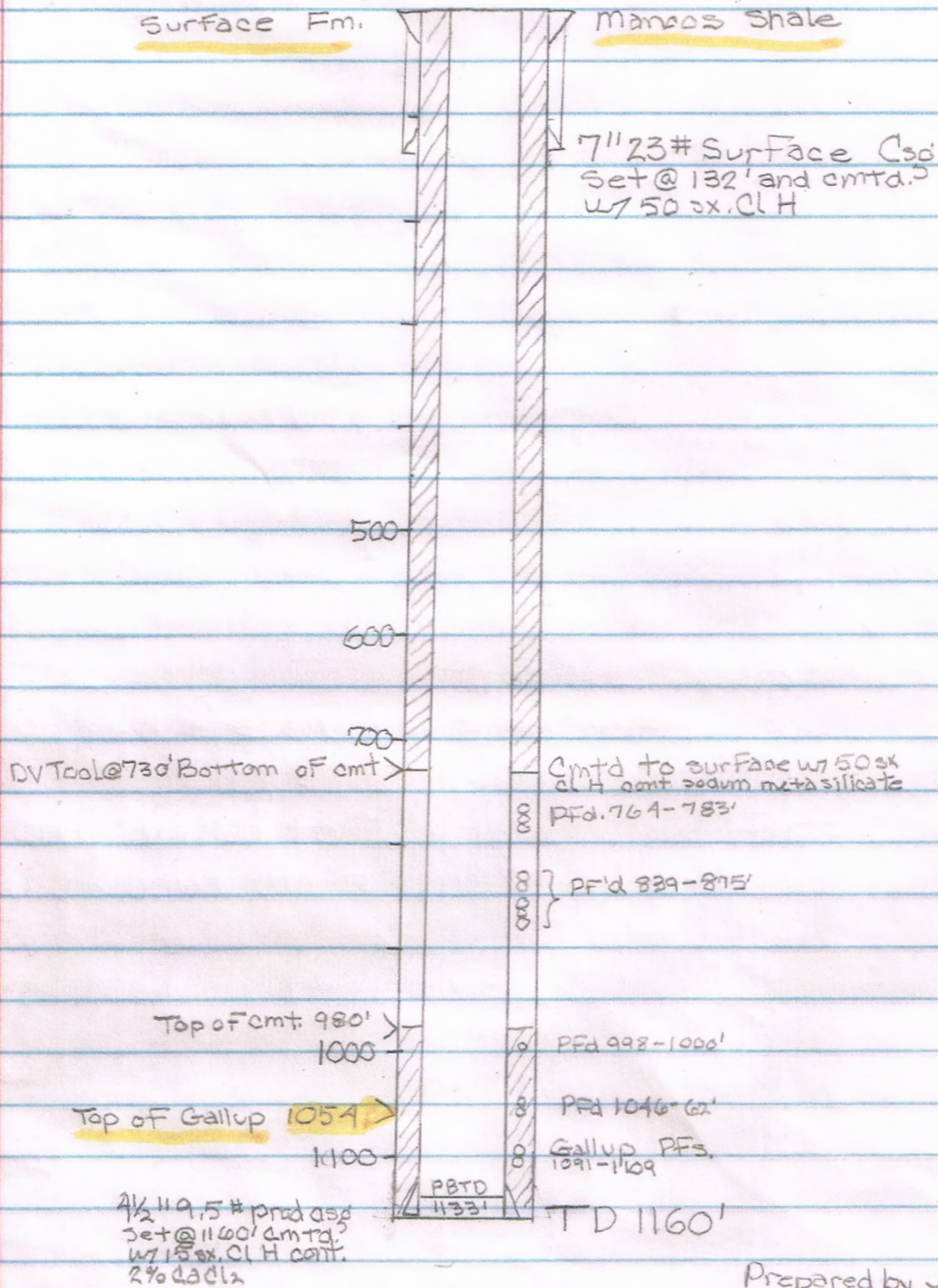
* A wellbore diagram accompanies this procedure.

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Current Wellbore Schematic New Mexico State #1 NE 1/4 NW 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



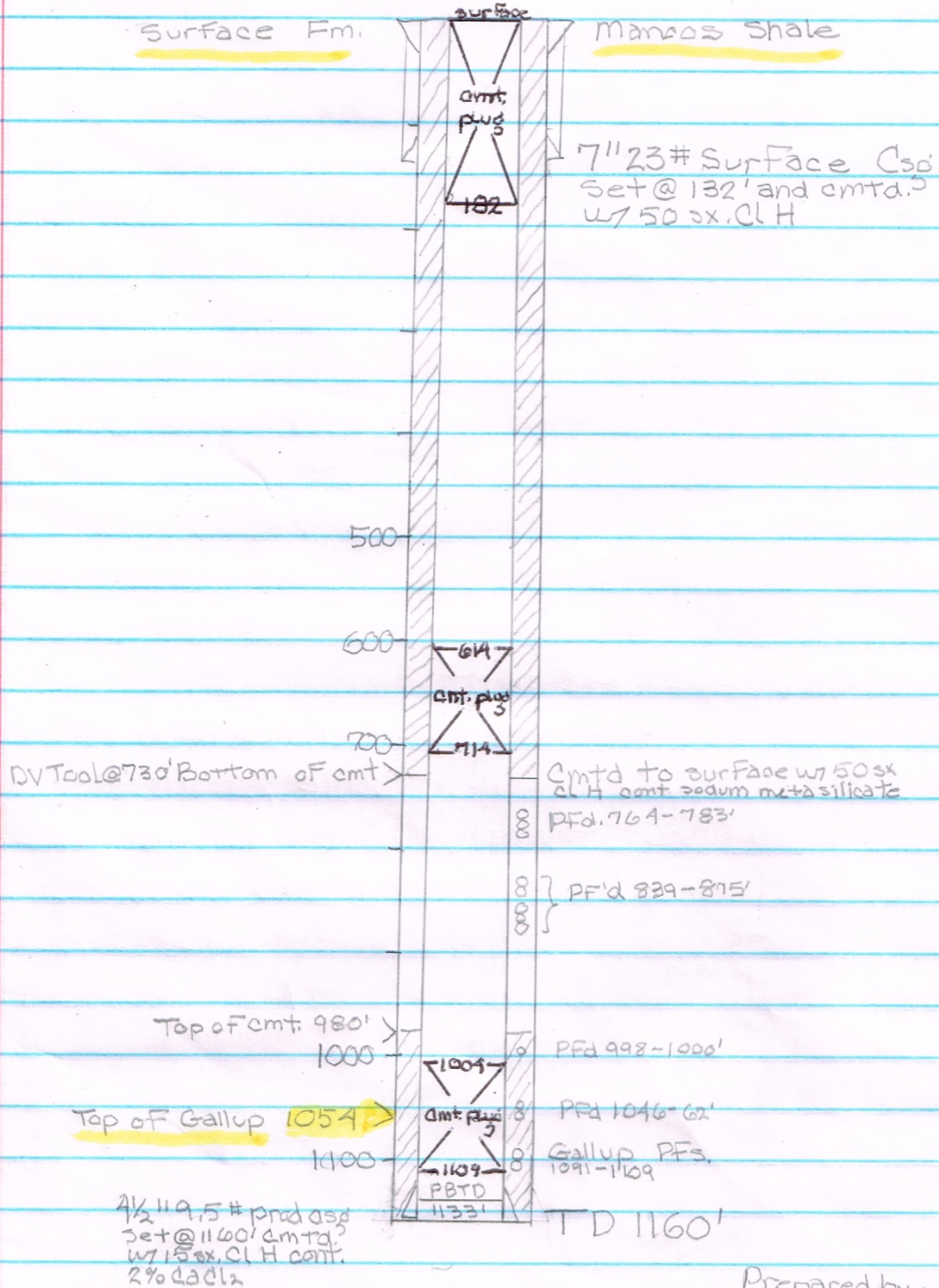
Prepared by J. Somers
on May 13, 2021

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Page 4 of 6

Proposed Wellbore Schematic New Mexico State #1 NE 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



Prepared by J. Somers
on May 13, 2021

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Page 5 of 6

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 28216

COMMENTS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID:	10459
	Action Number:	28216
	Action Type:	[C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/17/2021	5/17/2021

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IPANM 002418

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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 28216

CONDITIONS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/17/2021

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IPANM 002419

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Form C-105

Revised July 18, 2013

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit a Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-30291
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator High Plains Petroleum Corporation		6. State Oil & Gas Lease No. VA-2178
3. Address of Operator 3860 Carlock Drive, Boulder, CO 80305-6511		7. Lease Name or Unit Agreement Name New Mexico State
4. Well Location Unit Letter <u>C</u> : <u>330</u> feet from the <u>North</u> line and <u>1635</u> feet from the <u>West</u> line Section <u>16</u> Township <u>30N</u> Range <u>16W</u> NMPM, San Juan County		8. Well Number <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5284 GR		9. OGRID Number <u>10459</u>
10. Pool name or Wildcat Eagle Nest and Horseshoe		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Proposed plugging procedure:

Pull rods and pump
 Swab oil and water to Tank No. 7769
 Flush oil and water from the well into Tank No. 7769
 Plug by A-Plus Well Service as follows:
 Set a Class G cmt. plug from 1109' up to 1004' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 714' up to 614' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 182' to the surface
 Install a steel marker w/ required information shown

Rig estimated to be available June 15, 2021.

A Current Wellbore Schematic and a Proposed Wellbore Schematic accompany this form.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Pet. Engineer & President DATE 5/13/2021

Type or print name John B. Somers II E-mail address: HPBoulder@yahoo.com PHONE: 720-335-1662

For State Use Only

APPROVED BY: Brandon Powell TITLE DATE 5/18/2021

Conditions of Approval (if any):

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IPANM 002420

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Page 2 of 6

Preliminary OCD Plugging Procedure
New Mexico State #1 *
NE/4NW/4 Sec. 16, T30N, R16W
San Juan County, New Mexico

- (1) Pull rods and pump
- (2) Swab oil to Tank No. 7769
- (3) Plug as follows:
 - (a) 1109' up to 1004' w/ 50% excess
 - (b) WOC and then tag
 - (c) 714' up to 614' w/ 50% excess
 - (d) WOC and then tag
 - (e) 182' to surface
- (4) Abandon with erection of a steel marker showing High Plains Pet. as operator, New Mexico State #1, Unit Letter C, Sec. 16, T30N, R16N

* A wellbore diagram accompanies this procedure.

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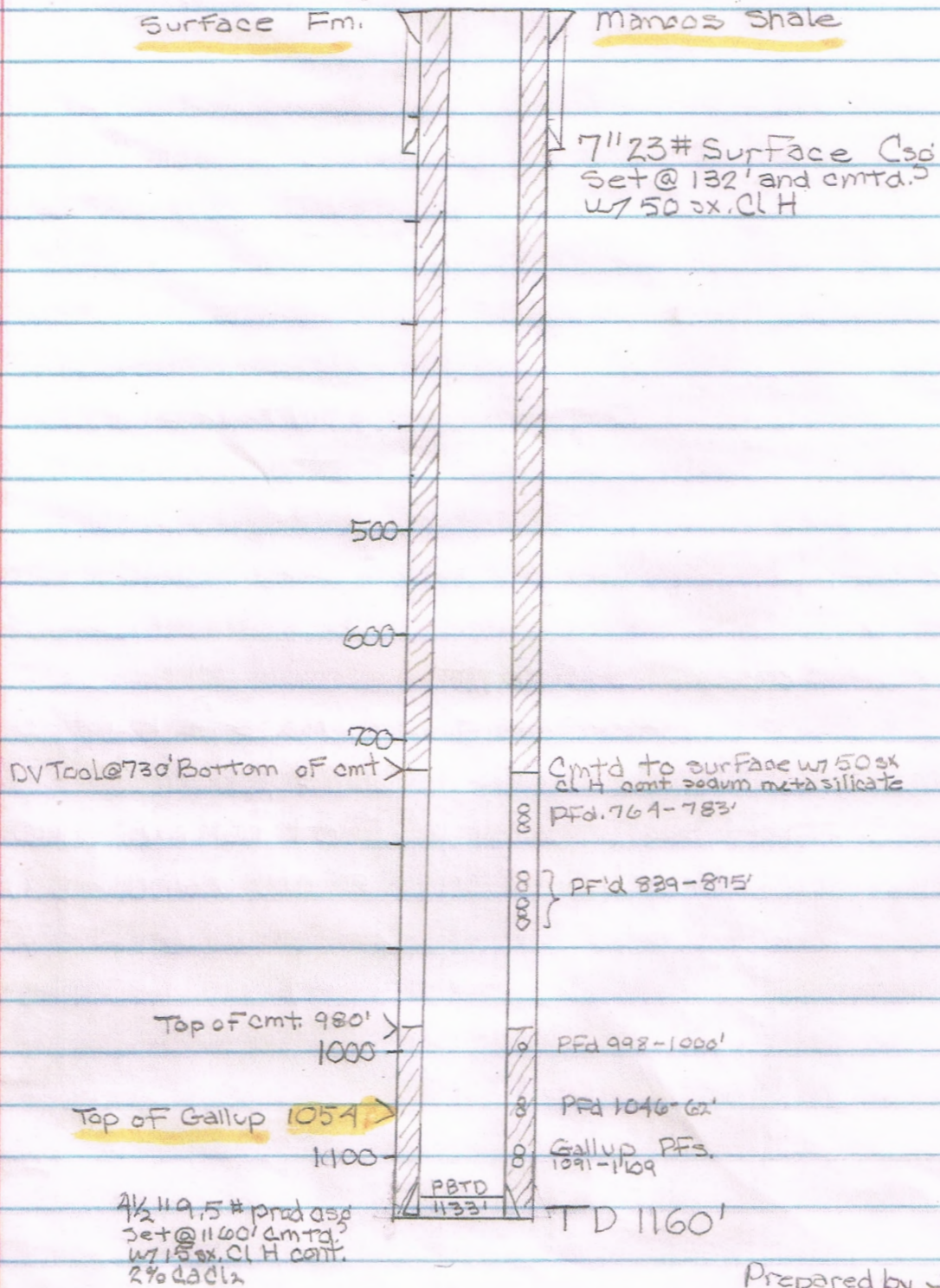
IPANM 002421

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Current Wellbore Schematic New Mexico State #1 NE 1/4 NW 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



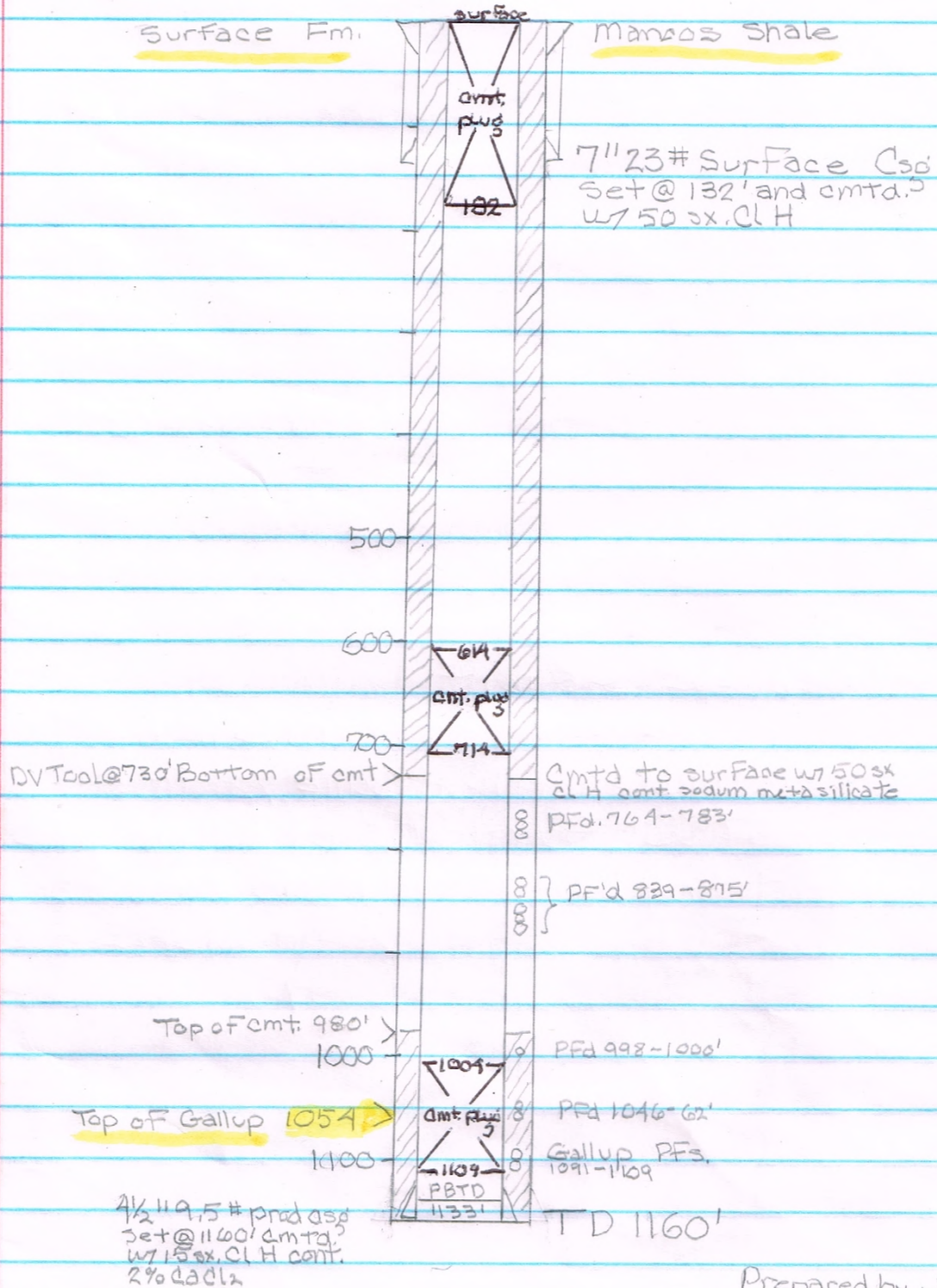
Prepared by J. Somers
on May 13, 2021

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Proposed Wellbore Schematic New Mexico State #1 NE 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



Prepared by J. Somers
on May 13, 2021

IPANM EXHIBIT 42

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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 28216

COMMENTS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/17/2021	5/17/2021

Released to Imaging: 6/18/2021 12:18:54 PM

IPANM 002424

IPANM EXHIBIT 42

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District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 28216

CONDITIONS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/17/2021

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IPANM 002425

IPANM EXHIBIT 42

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-30291
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator High Plains Petroleum Corporation		6. State Oil & Gas Lease No. VA-2178
3. Address of Operator 3860 Carlock Drive, Boulder, CO 80305-6511		7. Lease Name or Unit Agreement Name New Mexico State
4. Well Location Unit Letter <u>C</u> : <u>330</u> feet from the <u>North</u> line and <u>1635</u> feet from the <u>West</u> line Section <u>16</u> Township <u>30N</u> Range <u>16W</u> NMPM, <u>San Juan</u> County		8. Well Number <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5284 GR		9. OGRID Number <u>10459</u>
10. Pool name or Wildcat Eagle Nest and Horseshoe		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Proposed plugging procedure:

Pull rods and pump
 Swab oil and water to Tank No. 7769
 Flush oil and water from the well into Tank No. 7769
 Plug by A-Plus Well Service as follows:
 Set a Class G cmt. plug from 1109' up to 1004' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 714' up to 614' w/ 50% excess
 WOC and then tag
 Set a Class G cmt. plug from 182' to the surface
 Install a steel marker w/ required information shown

Rig estimated to be available June 15, 2021.

A Current Wellbore Schematic and a Proposed Wellbore Schematic accompany this form.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Pet. Engineer & President DATE 5/13/2021

Type or print name John B. Somers II E-mail address: HPBoulder@yahoo.com PHONE: 720-335-1662

For State Use Only

APPROVED BY: Brandon Powell TITLE DATE 5/18/2021

Conditions of Approval (if any):

IPANM EXHIBIT 42

Preliminary OCD Plugging Procedure
New Mexico State #1 *
NE/4NW/4 Sec. 16, T30N, R16W
San Juan County, New Mexico

- (1) Pull rods and pump
- (2) Swab oil to Tank No. 7769
- (3) Plug as follows:
 - (a) 1109' up to 1004' w/ 50% excess
 - (b) WOC and then tag
 - (c) 714' up to 614' w/ 50% excess
 - (d) WOC and then tag
 - (e) 182' to surface
- (4) Abandon with erection of a steel marker showing High Plains Pet. as operator, New Mexico State #1, Unit Letter C, Sec. 16, T30N, R16N

* A wellbore diagram accompanies this procedure.

IPANM EXHIBIT 42

Received by OCD: 5/13/2021 5:28:48 PM

Page 1 of 6

Form C-105

Revised July 18, 2013

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit a Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-30291
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator High Plains Petroleum Corporation		6. State Oil & Gas Lease No. VA-2178
3. Address of Operator 3860 Carlock Drive, Boulder, CO 80305-6511		7. Lease Name or Unit Agreement Name New Mexico State
4. Well Location Unit Letter <u>C</u> : <u>330</u> feet from the <u>North</u> line and <u>1635</u> feet from the <u>West</u> line Section <u>16</u> Township <u>30N</u> Range <u>16W</u> NMPM, San Juan County		8. Well Number <u>1</u>
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NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

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 WOC and then tag
 Set a Class G cmt. plug from 182' to the surface
 Install a steel marker w/ required information shown

Rig estimated to be available June 15, 2021.

A Current Wellbore Schematic and a Proposed Wellbore Schematic accompany this form.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Pet. Engineer & President DATE 5/13/2021

Type or print name John B. Somers II E-mail address: HPBoulder@yahoo.com PHONE: 720-335-1662

For State Use Only

APPROVED BY: Brandon Powell TITLE _____ DATE 5/18/2021

Conditions of Approval (if any):

Released to Imaging: 6/18/2021 12:18:54 PM

IPANM 002428

IPANM EXHIBIT 42

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Page 2 of 6

Preliminary OCD Plugging Procedure
New Mexico State #1 *
NE/4NW/4 Sec. 16, T30N, R16W
San Juan County, New Mexico

- (1) Pull rods and pump
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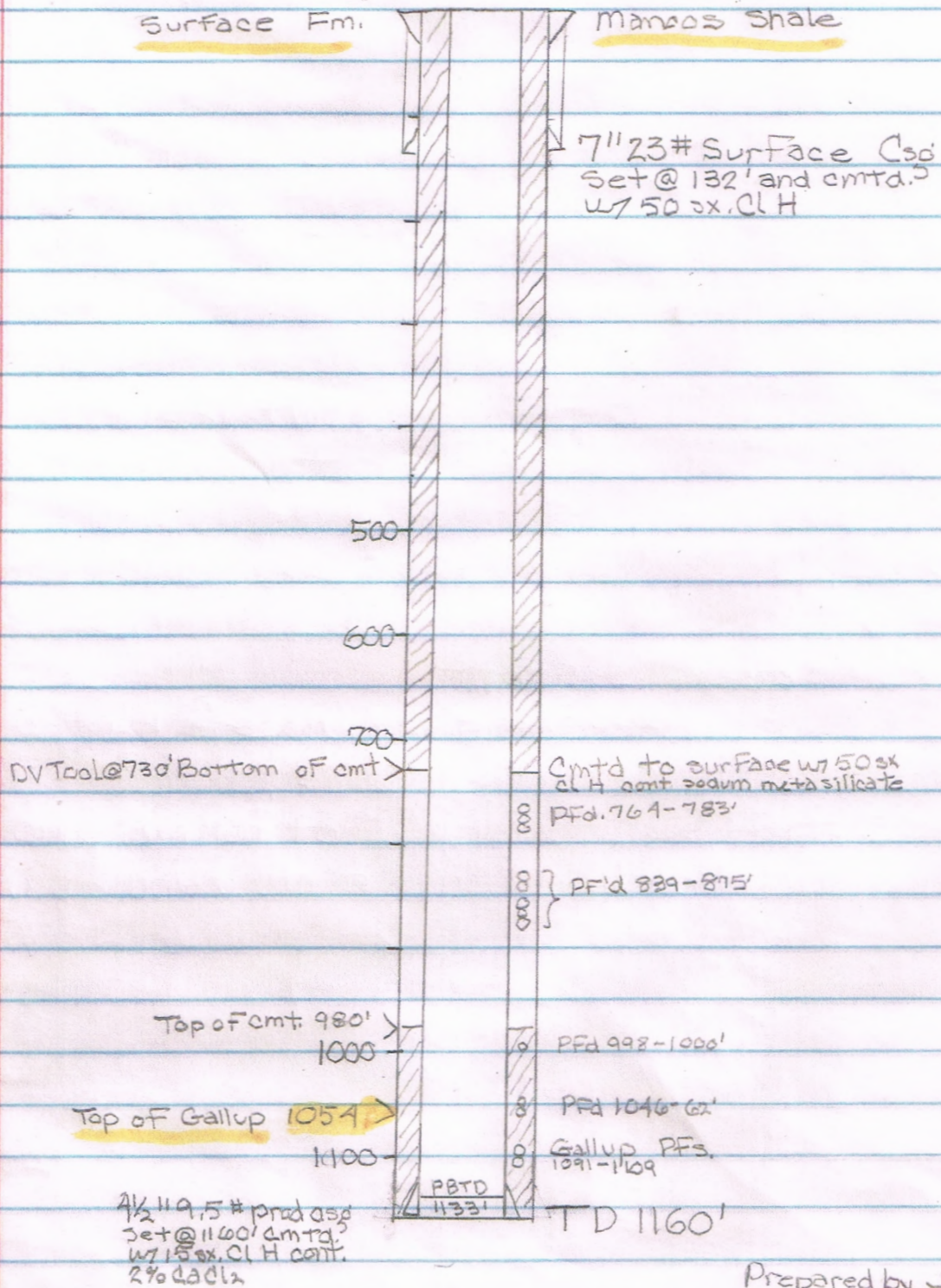
* A wellbore diagram accompanies this procedure.

IPANM EXHIBIT 42

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Page 3 of 6

Current Wellbore Schematic New Mexico State #1 NE 1/4 NW 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



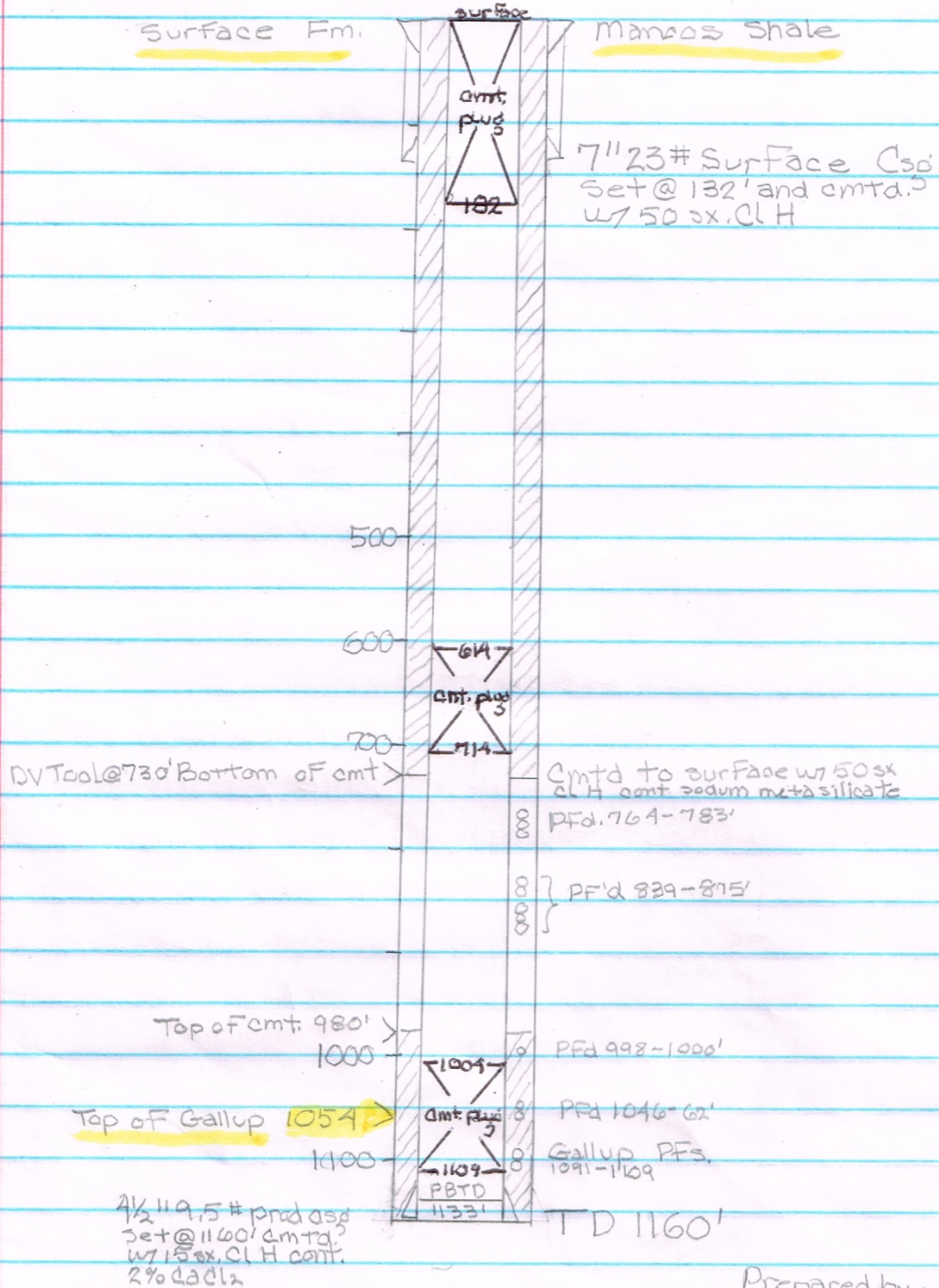
Prepared by J. Somers
on May 13, 2021

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Page 4 of 6

Proposed Wellbore Schematic New Mexico State #1 NE 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



Prepared by J. Somers
on May 13, 2021

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Page 5 of 6

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District IV
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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 28216

COMMENTS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/17/2021	5/17/2021

Released to Imaging: 6/18/2021 12:18:54 PM

IPANM 002432

IPANM EXHIBIT 42

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
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CONDITIONS

Action 28216

CONDITIONS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/17/2021

Released to Imaging: 6/18/2021 12:18:54 PM

IPANM 002433

IPANM EXHIBIT 42

Received by OCD: 5/13/2021 5:28:48 PM

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Form C-105

Revised July 18, 2013

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
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3. Address of Operator 3860 Carlock Drive, Boulder, CO 80305-6511		7. Lease Name or Unit Agreement Name New Mexico State
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 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
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 CLOSED-LOOP SYSTEM ☐
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 Install a steel marker w/ required information shown

Rig estimated to be available June 15, 2021.

A Current Wellbore Schematic and a Proposed Wellbore Schematic accompany this form.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John B. Somers II TITLE Pet. Engineer & President DATE 5/13/2021

Type or print name John B. Somers II E-mail address: HPBoulder@yahoo.com PHONE: 720-335-1662

For State Use Only

APPROVED BY: Brandon Powell TITLE _____ DATE 5/18/2021

Conditions of Approval (if any):

Released to Imaging: 8/13/2021 4:13:36 PM

IPANM 002434

IPANM EXHIBIT 42

Received by OCD: 5/13/2021 5:28:48 PM

Page 2 of 6

Preliminary OCD Plugging Procedure
New Mexico State #1 *
NE/4NW/4 Sec. 16, T30N, R16W
San Juan County, New Mexico

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* A wellbore diagram accompanies this procedure.

Released to Imaging: 8/13/2021 4:13:36 PM

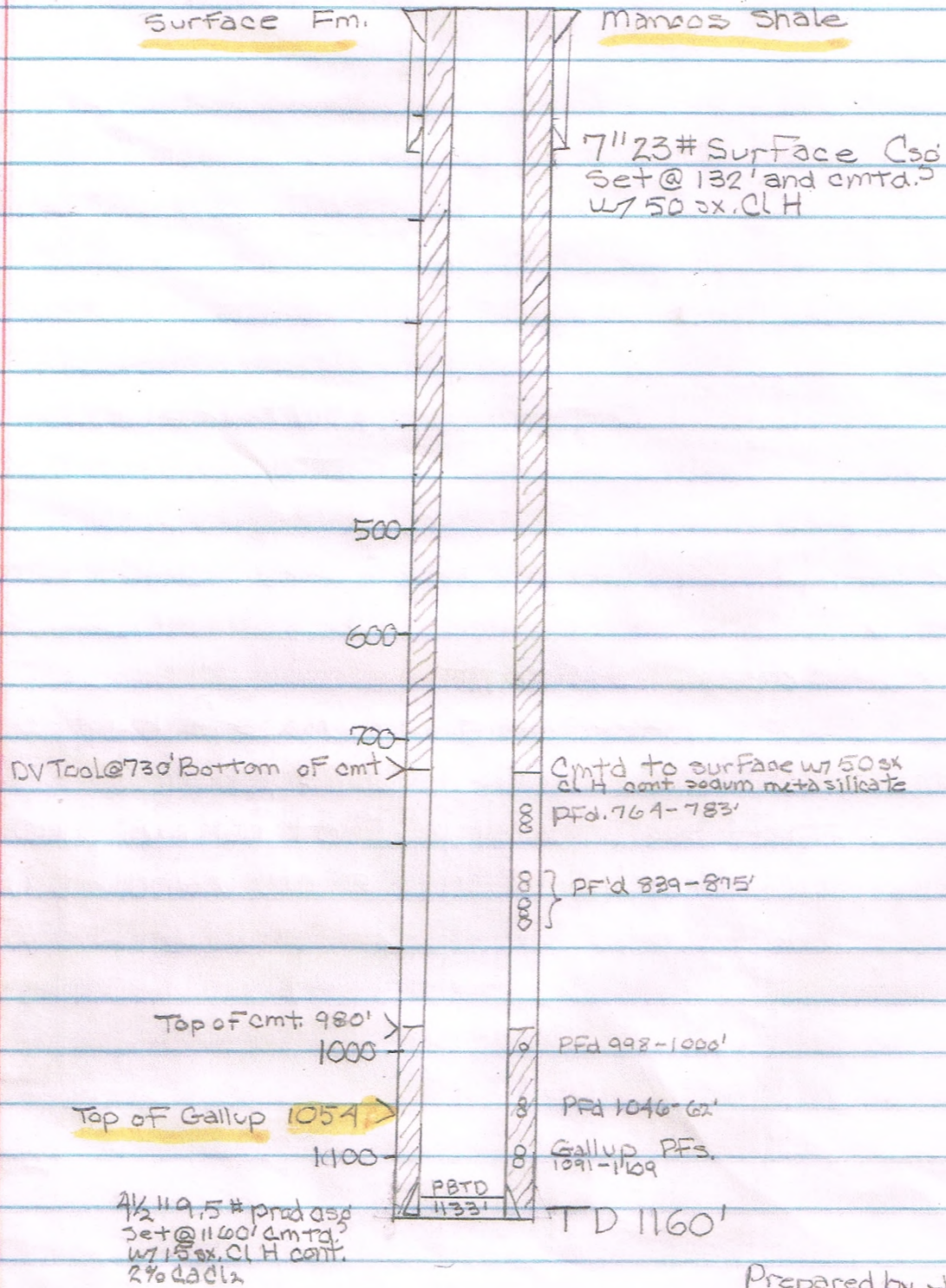
IPANM 002435

IPANM EXHIBIT 42

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Page 3 of 6

Current Wellbore Schematic New Mexico State #1 NE 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



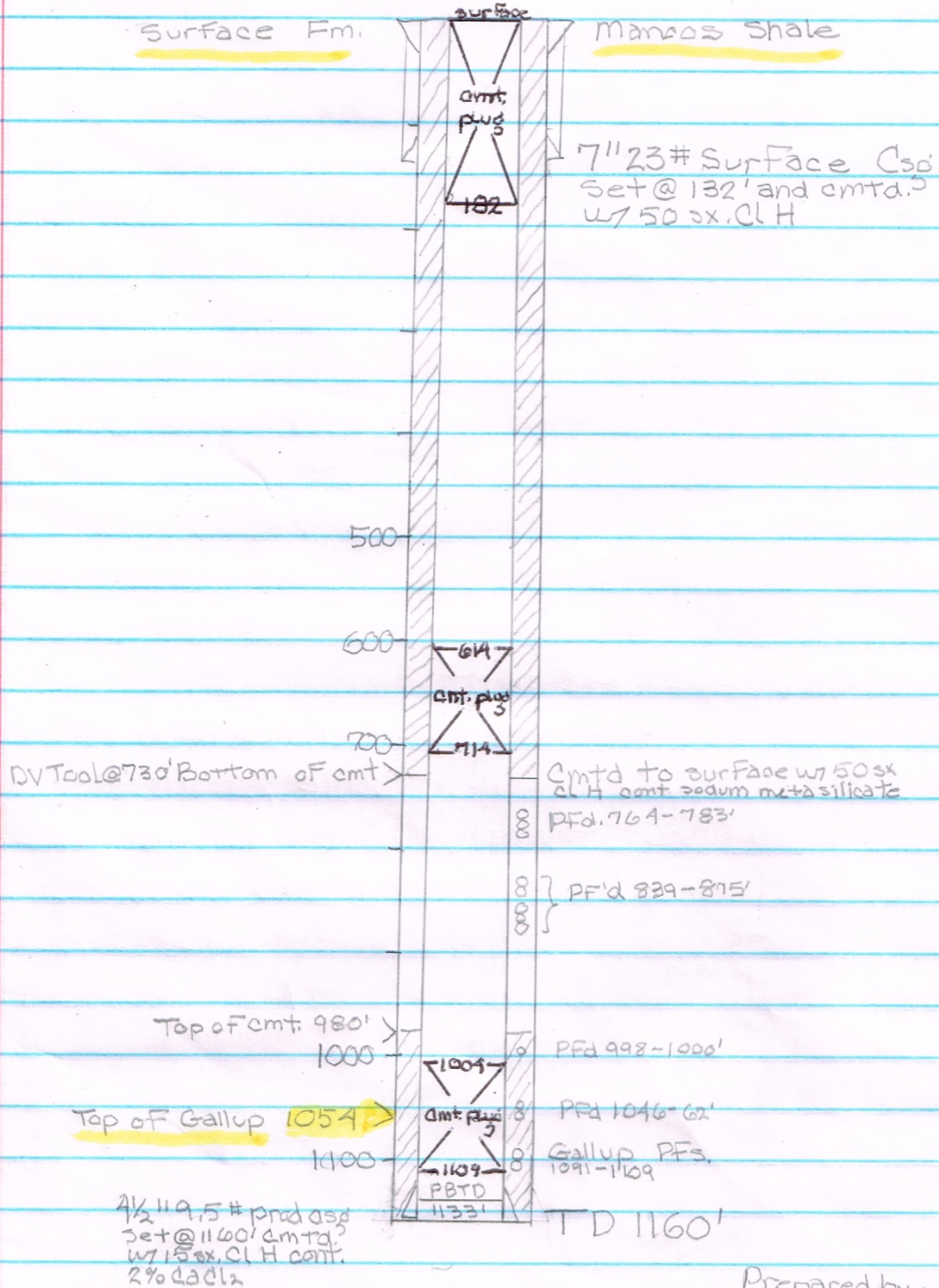
Prepared by J. Somers
on May 13, 2021

IPANM EXHIBIT 42

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Page 4 of 6

Proposed Wellbore Schematic New Mexico State #1 NE 1/4 Sec. 16, T30N, R16W, San Juan Co., New Mexico



Prepared by J. Somers
on May 13, 2021

IPANM EXHIBIT 42

Received by OCD: 5/13/2021 5:28:48 PM

Page 5 of 6

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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 28216

COMMENTS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/17/2021	5/17/2021

Released to Imaging: 8/13/2021 4:13:36 PM

IPANM 002438

IPANM EXHIBIT 42

Received by OCD: 5/13/2021 5:28:48 PM

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 28216

CONDITIONS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 28216
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/17/2021

Released to Imaging: 8/13/2021 4:13:36 PM

IPANM 002439

IPANM EXHIBIT 42
State Of New Mexico
Energy, Minerals and Natural Resources Department

16-Dec-24

HIGH PLAINS PETROLEUM CORP

Pre Enforcement Notification

3860 Carlock Dr
Boulder, CO 80305

Dear Operator:

The following inspection indicates that the well, equipment, location or operational status of the well failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date indicated.

Please notify the Compliance Officer copied on this letter, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

INSPECTION DETAIL SECTION

[30-045-30291] NEW MEXICO STATE #001 OGRID: 10459 C-16-30N-16W 330 FNL 1635 FWL

Inspection Date	Type Inspection	Inspector	Inspection No.	
12/16/2024	Routine Inspection	[TV] Thomas Vermersch	iTV2435139054	
Violation	Title			Corrective Action Due
cTV2435160948	19.15.16.8 Sign on Wells Absent Well Identification Sign (No sign on location.)			3/16/2025
cTV2435160949	19.15.29 Releases Surface Leaks/Spills (Staining around the wellhead that needs cleaned up. There also appears to be some staining in the below grade tank containment that needs cleaned up.)			3/16/2025
cTV2435160950	19.15.17 Pits, Closed-Loop Systems, Below Grade Tanks and Sumps Noncompliance with Requirements (Construction, Operations or Closure) (The base of the below grade tank needs dug out all the way around tank.)			3/16/2025

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well.

Note: Information in Detail Section comes directly from field inspector data entries - not all blanks will contain data.

IPANM EXHIBIT 42

Received by OCD: 4/22/2026 7:37:01 AM

Page 1 of 9

Submit a Copy To Appropriate District Office
 District I – (575) 393-6161
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State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		WELL API NO. 30-045-30291 5. Indicate Type of Lease STATE ☒ FEE ☐ 6. State Oil & Gas Lease No.
2. Name of Operator HIGH PLAINS PETROLEUM CORP		7. Lease Name or Unit Agreement Name NEW MEXICO STATE 8. Well Number #001
3. Address of Operator 3860 Carlock Dr Boulder, CO 80305 U.S.A.		9. OGRID Number 10459 10. Pool name or Wildcat [32870] HORSESHOE GALLUP ; [97138] EAGLE NEST MANCOS
4. Well Location 330 FNL & 1635 FWL C-16-30N-16W NMPM: San Juan County		
		11. Elevation (Show whether DR, RKB, RT, GR, etc.)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☒	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

The NM Land Office plans to plug this well in accordance with the attached procedure and any agreed modifications thereto.

Move on location: TBD
 Move off location: TBD

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: Ethan Wakefield TITLE: Authorized Representative DATE 3/31/26
 Type or print name: Ethan Wakefield E-mail address: e.wakefield@dwsrigs.com PHONE: 405-343-7736
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
 Conditions of Approval (if any):

Released to Imaging: 4/22/2026 11:00:55 AM

IPANM 002441

HIGH PLAINS PETROLEUM CORP

Plug And Abandonment Procedure

NEW MEXICO STATE #001

330 FNL & 1635 FWL, C-16-30N-16W

San Juan County, NM / API: 30-045-30291

1. Hold pre-job safety meeting. Comply with all NMOCD, BLM safety and environmental regulations. Test rig anchors prior to moving in rig if not rigged to base beam.
2. Perform spiral gas check. Check casing, tubing, and Bradenhead pressures.
3. Remove existing piping on casing valve. RU blow lines from casing valves and begin blowing down casing pressure. Perform well kill as necessary. Ensure the well is dead or on a vacuum.
4. ND wellhead and NU BOP. Function test BOP.
5. P/U 4-1/2" bit or casing scraper on 2-3/8" work string and round trip as deep as possible above lower perforations at 998'.
6. P/U 4-1/2" CR, TIH and set CR at +/- 948'. Pressure test tubing to 1000 psi. Sting out of CR. Load hole and pressure test casing to 800 psi. If casing does not test, then spot or tag subsequent plugs as appropriate. POOH w/ tubing.
 - a. NOTE: Plugs #1 - #3 may be pumped prior to the CBL due to the open perforations. It is unlikely that loading the hole or a pressure test will be successful.
7. Rig up to pump cement down tubing. Pump water to establish rate down tubing.

NOTE: All plugs include excess footage to meet requirements.

8. Plug 1: **Below CR, Top 948', 13 Sacks Class G Cement**

Mix 13 sx Class G cement and squeeze below CR at 948' to cover the perforations.

9. Plug 2: **Above CR, 948'-873', 6 Sacks Class G Cement**

Mix 6 sx Class G cement and spot a balanced plug inside casing to cover the perforations.

10. P/U 4-1/2" CR, TIH and set CR at +/- 680'. Pressure test tubing to 1000 psi. Sting out of CR. Load hole and pressure test casing to 800 psi. If casing does not test, then spot or tag subsequent plugs as appropriate. POOH w/ tubing.

a. NOTE: Plug #3 may be pumped prior to running the CBL.

11. RU wireline and run CBL with 500 psi on casing from CR at 680' to surface to identify TOC. Adjust plugs as necessary for new TOC. Email log copy to Diede, Loren, Loren.Diede@emnrd.nm.gov and to Gilbert Cordero at gilbert.cordero@emnrd.nm.gov upon completion of logging operations.

12. Rig up to pump cement down tubing. Pump water to establish rate down tubing.

13. Circulate wellbore.

14. Plug 3: **Below CR, Top 680', 16 Sacks Class G Cement**

Mix 16 sx Class G cement and squeeze below CR at 680' to cover the perforations.

15. Plug 4: **Above CR, 680'-580', 8 Sacks Class G Cement**

Mix 8 sx Class G cement and spot a balanced plug inside casing to cover the perforations and DV tool.

16. Plug 5: Surface Casing Shoe, 182' - Surface, 15 Sacks Class G Cement

Attempt to pressure test the bradenhead annulus to 300 psi; note the volume to load. If BH annulus holds pressure, then establish circulation out casing valve with water. If BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the casing from 182' and the annulus from the squeeze holes to surface. Shut in well and WOC.

17. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and restore location per BLM stipulations.



Existing Wellbore Diagram

HIGH PLAINS PETROLEUM CORP
NEW MEXICO STATE #001
API: 30-045-30291
San Juan County, New Mexico

Surface Casing

7" 23# @ 132'

OH: 8-3/4"

Cemented w/ 50 sx

Formation

DV Tool - 730'

Mancos - 1054'

Gallup - 1090'

Production Casing

4-1/2" 9.5# @ 1160'

OH: 6-1/4"

0.0912 cu-ft/ft

Perforations

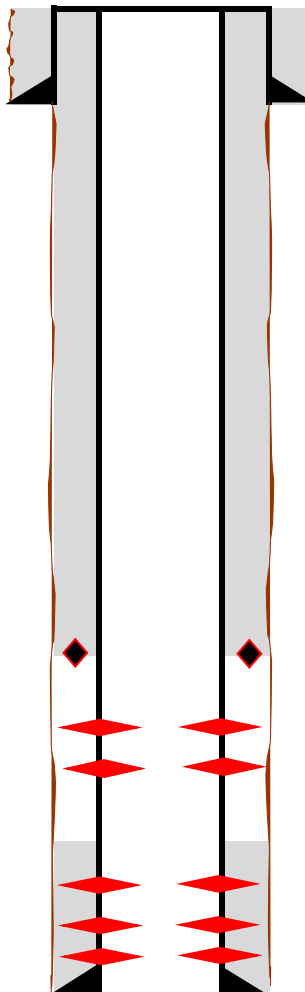
764' to 783'

839' to 875'

998' to 1000'

1046' to 1062'

1091' to 1109'





Proposed Wellbore Diagram

HIGH PLAINS PETROLEUM CORP
NEW MEXICO STATE #001
API: 30-045-30291
San Juan County, New Mexico

Plug 5 Surface 182' to Surface 182 foot plug 15 sacks Class G Cement	Surface Casing 7" 23# @ 132' OH: 8-3/4" Cemented w/ 50 sx	
Plug 4 Above CR 680' to 580' 100 foot plug 8 sacks Class G Cement	Formation DV Tool - 730' Mancos - 1054' Gallup - 1090'	
Plug 3 SQ Under CR Top 680' 16 sacks Class G Cement	Production Casing 4-1/2" 9.5# @ 1160' OH: 6-1/4" 0.0912 cu-ft/ft	
Plug 2 Above CR 948' to 873' 75 foot plug 6 sacks Class G Cement	CR @ 680'	
Plug 1 SQ Under CR Top 948' 13 sacks Class G Cement	CR @ 948'	
Class G: 1.15 cu-ft/sx 15.8 ppg	Perforations 764' to 783' 839' to 875' 998' to 1000' 1046' to 1062' 1091' to 1109'	

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan-Grisham
Governor

Erin Taylor
Acting Cabinet Secretary

Ben Shelton
Deputy Secretary

Albert C.S. Chang
Division Director
Oil Conservation Division



BY ELECTRONIC MAIL

April 15, 2026

Ari Biernoff
General Counsel for New Mexico State Land Office ("SLO")
Via email: abiernoff@nmslo.gov

Re: SLO's Request to Plug and Abandon New Mexico State #001

Dear Mr. Biernoff:

The Oil Conservation Division ("OCD") received SLO's request for permission to plug and abandon the following well: New Mexico State #001 (API#: 30-045-30291). High Plains Petroleum Corporation is the registered operator ("Operator") of this well, and OCD consents to SLO's request to plug, abandon, and remediate the aforementioned wells.

Pursuant to the Order Granting Plaintiff Commissioner of Public Lands' Motion for Summary Judgment, and Final Judgment in D-101-CV-2021-02370 (*Stephanie Garcia Richard, Commissioner of Public Lands of the State of New Mexico v. High Plains Petroleum Corporation*) filed in the First Judicial District of Santa Fe County, SLO was awarded damages for the costs of plugging, remediation, and reclaiming the surface for above-referenced well. The Court also found that Operator has acted negligently with respect to its operations of the well, has not reclaimed the well, and has failed to remediate soil contamination associated with oil and gas production at the well site. The Court found that Operator had a duty to plug the well and failed to fulfill that obligation. Pursuant to the Court's findings, OCD hereby authorizes SLO to plug, abandon, and remediate the New Mexico State #001.

Please contact Michael Hall, Assistant General Counsel, at Michael.Hall@emnrd.nm.gov with questions, including the submission of plugging sundries, as OCD will not be transferring operatorship to SLO and will need to insert the plugging sundries into the wellfiles. **This letter must be submitted with the C-103F and C-103P filings submitted to OCD regarding the plugging of the well(s) covered by this authorization.**

1- Authorization for SLO to Plug

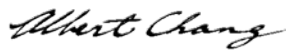
IPANM EXHIBIT 42

Received by OCD: 4/22/2026 7:37:01 AM

Page 8 of 9

State of New Mexico
Energy, Minerals and Natural Resources Department

Regards,



Albert C.S. Chang
Division Director
Oil Conservation Division

4/16/2026

Date

2- Authorization for SLO to Plug

Released to Imaging: 4/22/2026 11:00:55 AM

IPANM 002448

IPANM EXHIBIT 42

Received by OCD: 4/22/2026 7:37:01 AM

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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 578037

CONDITIONS

Operator: HIGH PLAINS PETROLEUM CORP 3860 Carlock Dr Boulder, CO 80305	OGRID: 10459
	Action Number: 578037
	Action Type: [C-103F] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	Notify the OCD inspection supervisor via email 24 hours prior to beginning Plug & Abandon (P&A) operations.	4/22/2026
loren.diede	Submit Cement Bond Logs (CBL) prior to submittal of C-103P.	4/22/2026
loren.diede	For Orphan wells OCD requires a photo and the GPS coordinates of the P&A marker to be included with the C-103P subsequent P&A report. The API# on the marker photo must be clearly legible.	4/22/2026
loren.diede	Plug # 3 that is to be placed under the CR set @ 680' should be changed to an Outside/Inside plug. There is no cement outside the 4 1/2" casing from 990' to the DV tool at 730'. (As per CBL on file, 2-26-2001)	4/22/2026

Released to Imaging: 4/22/2026 11:00:55 AM

IPANM 002449

IPANM EXHIBIT 42
State Of New Mexico
Energy, Minerals and Natural Resources Department

14-May-26

HIGH PLAINS PETROLEUM CORP

Pre Enforcement Notification

3860 Carlock Dr
Boulder, CO 80305

Dear Operator:

The following inspection indicates that the well, equipment, location or operational status of the well failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date indicated.

Please notify the Compliance Officer copied on this letter, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

INSPECTION DETAIL SECTION

[30-045-30291] NEW MEXICO STATE #001

OGRID: 10459

C-16-30N-16W 330 FNL 1635 FWL

Inspection Date	Type Inspection	Inspector	Inspection No.	
5/14/2026	Routine Inspection	[CZS] Clarence Smith	iCZS2613424087	
Violation	Title			Corrective Action Due
cCZS2613453896	19.15.17 Pits, Closed-Loop Systems, Below Grade Tanks and Sumps Noncompliance with Requirements (Construction, Operations or Closure) (BGT has a hydrocarbon substance in it.)			8/12/2026

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well.

Note: Information in Detail Section comes directly from field inspector data entries - not all blanks will contain data.

IPANM EXHIBIT 43

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Surface Resources Division
New Mexico State Land Office
Commissioner Stephanie Garcia Richard

PROJECT PLAN ROUTING MEMORANDUM

Date: 2/17/2025
To: Stephanie Garcia Richard, Commissioner of Public Lands
Through: Sunalei Stewart, Deputy Commissioner of Operations
Dana Vackar Strang, Assistant Commissioner of Surface Resources
April Elliott, Director, Surface Resources Division

Project Coordinator: Becky Griffin, Liz Bisbey-Kuehn

=====

Project Name: Jay Mgmt Co State OG SWD #002 Site Remediation Phase II - Continued

Estimated Cost: \$100,000

Budget Source:

☒ Contractual Funds Remaining Balance: \$176,000

Restoration & Remediation Funds Remaining Balance:

Will the project leverage additional funds on STL? Yes ☒ No

State Federal Private Amount of leveraged funds:

Project Purpose:

Consultation:

Capacity Building Policy

Planning:

Partnership Pre-treatment clearances

☒ Treatment:

Emergency Response ☒ Legacy Remediation

Long-term Maintenance Other:

Treatment Type: (check all that apply)

Archaeology or Biological Clearance Fuelwood Thinning

Prescribed Fire Herbicide Treatment

Illegal Dump Clean Up ☒ Reclamation/Remediation

Erosion Control Other:

Additional information (optional):

The money for this project was pulled from bonds seized from Jay Management Company and put into the contractual services budget.

IPANM 002451

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NEW MEXICO STATE LAND OFFICE

Surface Resources Division



**JAY MANAGEMENT COMPANY STATE OG SWD #002
SITE DELINEATION PHASE II (Continued)
General Services Contract**

IPANM EXHIBIT 43

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued

AUTHORIZATION PAGE

This plan has been reviewed and approved by the following individuals.

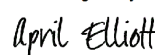
Project	Signed by:  F7E41CABA4C644E...	2/19/2025
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Becky Griffin	Date
---------------	------

Remember	Signed by:  1DC4D487A1174A1...	2/20/2025
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Liz Bisbey-Kuehn ECO Manager, Surface Resources	Date
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State Land Office Approval:

DocuSigned by:  09776A2B41294F0...	2/20/2025
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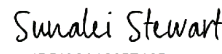
April Elliott Director, Surface Resources	Date
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DocuSigned by:  C9D6478B3DA141C...	2/20/2025
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Dana Vackar Strang Assistance Commissioner, Surface Resources	Date
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DocuSigned by:  C42FCE7560D84E7...	2/20/2025
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Ari Biernoff General Counsel	Date
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Signed by:  1D513CA1C85E4CB...	2/20/2025
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Sunalei Stewart Deputy Commissioner of Public Lands	Date
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DocuSigned by:  80A84ED7FDCE465...	2/20/2025
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Stephanie Garcia Richard Commissioner of Public Lands	Date
--	------

IPANM EXHIBIT 43

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued

PROJECT OVERVIEW

Name: JAY MANAGEMENT STATE OG SWD #002
SITE DELINEATION PHASE II - Continued

District: Hobbs

Directions: The site is located approximately 21.3 miles northwest of Tatum, New Mexico. Access is via US-380 west for 18.4 miles to Burro Alley Rd. Turn right and travel north for 1.5 miles. Turn left and pass through a gate/cattle guard and travel west for 0.38 miles and follow the road right for 0.58 miles to the site.

Target Acres Treated: 2.5 acres

Project Category: SWD Site Delineation and Assessment

Legal Description:

Sections: NWSW (L) 9
Township: 11 South
Range: 33 East
County: Lea County
Latitude, Longitude: 33.3786, -103.6258

Current Leasing Information:

Agricultural/Grazing: G02372
Rights of Ways: R16925, R25266
Commercial:
Mining and Minerals:
Oil/Gas:
Water Developments: SW0168
Other:

STATEMENT OF NEED

Multiple historic releases and poor facility operational practices at the Jay Management Company Tank Battery and SWD (API 30-025-31381) have resulted in extensive petroleum hydrocarbon and chloride contamination at this site. Five release incidents are recorded for the subject site in the OCD database: two in 2008, one in 2009, 2015, and 2017. Incident #NJCW0820048507 (2008) is the only incident of the five that has been approved for closure by NMOCD.

A site inspection was conducted April 25, 2023. The site was found to be abandoned, as in prior field reports from 2020 and 2018.

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New Mexico State Land Office Jay Management Company SWD Site Delineation Phase II - Continued

A review of historical aerials confirms significant staining within the site boundary in 2012, 2014, and 2018. A large reserve pit located northwest of the tank battery is visible in the 2009 aerial and observed in the 2023 field inspection. Tanks are visible along the east boundary of the site in the 1996 aerial. These tanks were not observed during the 2023 field inspection. All historical images and present-day conditions, document the lack of vegetation growth to the north of the tank battery, which is the location of the buried reserve pit. Additionally, livestock trespass is evident in all historical images.

The remediation and restoration of this site has been broken down into multiple phases.

1. The Jay Management State OG SWD #002 injection well was plugged August 10, 2022. The Jay Management Tank Battery and SWD Site Remediation Phase I project (NMSLO Project FY23-030) was completed November 18, 2023 and resulted in the removal of all tank batteries, equipment, trash and debris from the site.
2. Phase II is a site assessment and characterization delineation of the well pad and reserve pit north of the well pad, and the development of a remediation and reclamation plan with cost estimates. Phase II was only partially completed under the previous project plan. That project (NMSLO Project FY24-020) was completed on June 24, 2024. Due to the extensive contamination at this site, full delineation of the historical releases was not achieved, either horizontally or vertically. This project plan proposes to fully complete the site assessment and delineation under this work order. Three groundwater monitoring wells and five additional soil borings are needed to determine the vertical and horizontal extent of the chloride and hydrocarbon contamination.
3. Phase III will be the completion of the remediation and reclamation work based on the results of Phase II and the remediation and reclamation cost estimates. Phase II and III are separate due to the uncertainty of the scope of work and costs, as well as funding source to complete that work.

PARTNERSHIPS

No partners at this time although notice to NMOCD will be provided as necessary.

GOALS

The goal for the *Jay Management Company SWD Site Delineation and Assessment Phase II Project* is as follows:

1. Complete the horizontal and vertical delineation of contamination at this site, building off of the extensive work conducted by the previous contractor, Tasman.
2. The previous contractor, Tasman, conducted site assessment activities to assess historical exploration and production releases at the site. A total of twenty-one soil borings were advanced at the site. Fifteen of the twenty-two soil borings had at least one soil sample exhibiting a concentration of chlorides greater than the regulatory standards. Full

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New Mexico State Land Office Jay Management Company SWD Site Delineation Phase II - Continued

delineation of soils impacted by the historical releases were not achieved, horizontally or vertically.

3. Install five soil borings to determine lateral extents of chemicals of concern as required by 19.15.29.11(A)(5) NMAC.
4. Install three monitoring wells at the site to determine chloride concentrations. Previous sampling indicated significant chloride concentrations near the assumed depth to groundwater.
5. Based upon the results of the sampling conducted onsite, provide an estimate of the volume of material to be removed, the cost to remove the contaminated soil, and the cost to operate groundwater monitoring wells and treat the contaminated groundwater, if needed.
6. Based upon the results of the sampling conducted onsite and the volume of material to be removed, provide an estimate of the cost to reclaim the site.

CURRENT SITE CONDITIONS

The site is currently occupied by the plugged and abandoned well marker (plugged August 2022). Vegetation inside the fence is sparse and consists of noxious weeds. Soil at the site consists of the Kimbrough-Lea complex which consists of loamy, eolian deposits derived from sedimentary rocks. Surficial soil is gravelly loam and cemented material is encountered at 10 to 16 inches below ground surface (bgs).

This subject tract occurs as desert grassland. The area is level with slopes from 0-3%. Primary plants include mesquite, grama, tobosa, burro grass, snakeweed, and annual forbs.

BIOLOGICAL AND CULTURAL CONSIDERATIONS

Biological

The project area is within a CHAT 5 due to Species of Economic and Recreational Importance (SERI). Modeled habitat for two SERI occurs within or near the project area, including Mule Deer and Pronghorn. The improvement will benefit these SERI. SOC that have been recorded near the project area include Burrowing Owl and Long-billed Curlew. A non-exhaustive list of additional SOC that may occur in the area include Black-Tailed Prairie Dog, Lesser-Prairie Chicken, Common Nighthawk, Loggerhead Shrike, Western Bluebird, Thick-billed Longspur, Cassin's Sparrow, Sagebrush Sparrow, Vesper Sparrow, Dunes Sagebrush Lizard, and Western Massasauga. The site is outside of the LPC/DSL CCAA, however both species have been observed in the vicinity.

A Migratory Bird Treaty Act-compliant survey for all nesting birds should occur within 2 weeks of project commencement during the migratory bird nesting season (March 1 – August 31). If nesting activity is observed onsite for any bird species, the NMSLO biologist will work with the project lead and contractors to establish an appropriate buffer zone around the active nest. Work completed outside of the migratory bird nesting season will not require a survey.

Cultural

The APE of this project has not been included in any previous cultural resource surveys. Remediation activities may take place within the previously disturbed surface area. If surface

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New Mexico State Land Office Jay Management Company SWD Site Delineation Phase II - Continued

disturbing activities need to take place for delineation and further remediation outside of the previously disturbed surface area, then a cultural resource survey should be completed in collaboration with the NMSLO Cultural Resources Office. Since the lessee chose not to complete a survey prior to construction, it is recommended to conduct a compliance investigation to determine if the previous development and releases have impacted any undocumented cultural properties. This investigation could be completed in the same survey used for delineation compliance.

PLANNED PROJECT TIMING

Start Date: April 15, 2025
Completion Date: May 30, 2025

PURCHASING PROCESS

The contractor will provide an itemized written bid to the NMSLO. Bids outlining how the work will be accomplished and/or demonstrating that the Contractor is prepared and capable of completing the project according to the prescription are appreciated.

The site will be open for visitation with a State Land Office representative on **Tuesday, March 11, 2025, 9:30 am to 12:00 pm**. Attendance is strongly recommended any time between the designated hours.

A. New Mexico State Procurement Code will be followed.

B. All bidders will be notified of the outcome.

C. No work shall occur until a purchase order is in place.

Each contractor will provide an all-inclusive, fully loaded written bid detailing costs for each line item. Line items may be broken out into further subdivisions so long as each line item has a total cost associated with that item. The bid should be presented in table form as shown in the example below.

Specification Item No.	Description	Quantity	Unit of Measure	Unit Price	Total
1	Soil Borings				
2	Groundwater Monitoring Well				
3	Lab Testing				
4	Estimation of Remediation and Reclamation				
5	New Mexico GRT				
Total					

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued

The services described above and to be performed by the Contractor on state trust lands shall conform to all applicable state and local laws and regulations.

These services are authorized by the Commissioner to occur on state trust lands at the locations indicated in this project plan.

Bids will be due on March 24, 2025 by 5:00 pm MST via hand delivery, email or postal mail.

For questions related to the prescription or project, please contact:

CONTACT INFO FOR PROJECT COORDINATOR:

Becky Griffin, Remediation Specialist
Surface Resources – Environmental Compliance Office
505-699-2479 or 505-670-1638
bgriffin@nmslo.gov

QUESTIONS RELATED TO PROCUREMENT SHOULD BE DELIVERED TO:

Chris Montoya, Administrative Services Division
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501
505-827-4445
cjmontoya@nmslo.gov

INVOICING AND INSPECTIONS

The NMSLO project coordinator will review contractor activities to ensure the prescription is adhered to. Evaluation of work will continue throughout the project.

A. Invoice Approval Process: Invoices should be delivered to the Project Coordinator and will be routed through the Surface Resources Division and Commissioner of Public Lands for review and approval. Invoices will not be paid without a project inspection and approval by the project coordinator.

B. Billing Frequency: Contractors may bill the Land Office at the completion of the project, or in increments only to the percentage that the project has been completed, inspected and approved by the Project Coordinator.

C. Contractor and Project Evaluations will be conducted upon project completion.

Attachments:

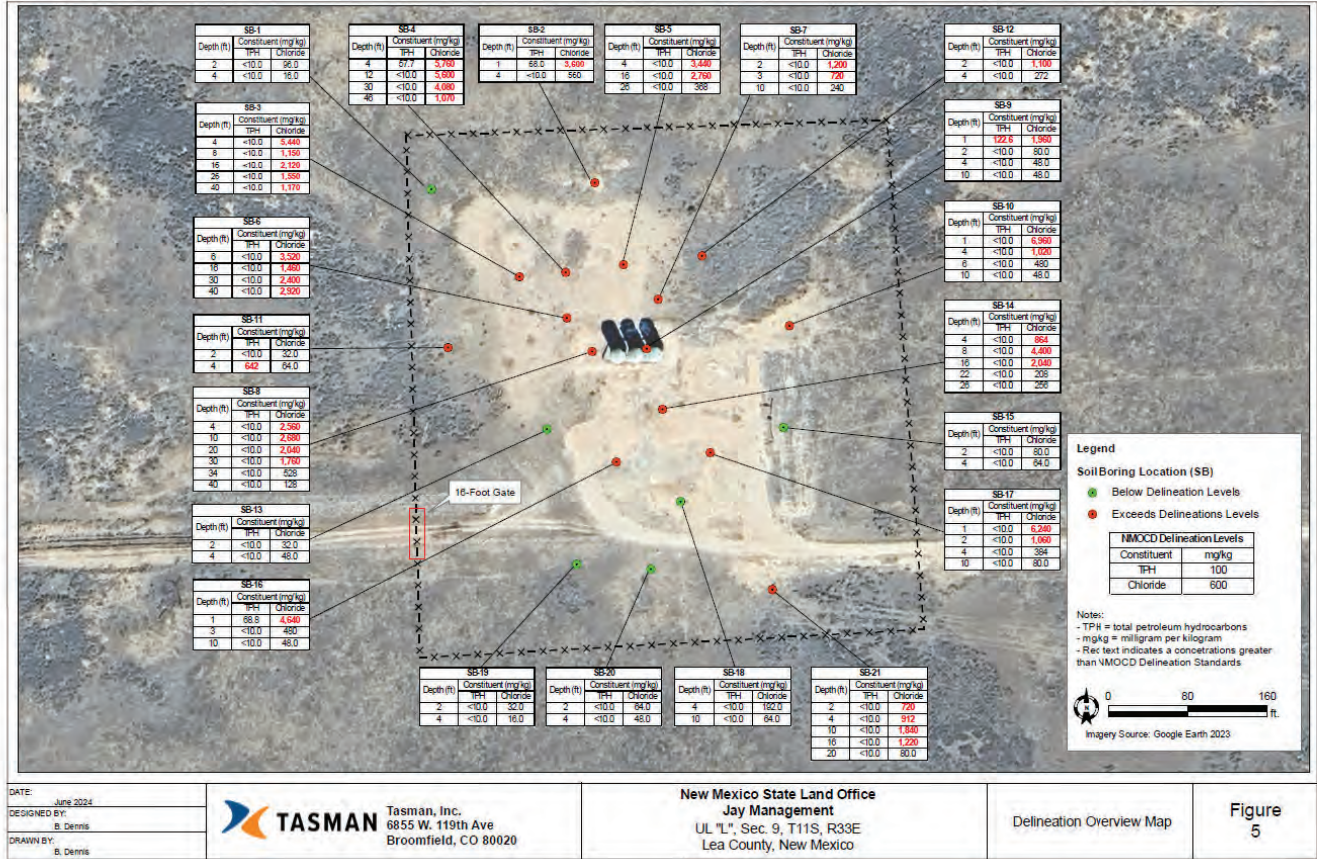
1) JAY MANAGEMENT Site Assessment Report, dated June 24, 2024

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued

PHOTOS AND SITE PLANS



Soil Boring Locations
Red circles depict samples exceeding regulatory closure limits

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued



The storage tanks have been removed. Photo depicting condition of the well pad



Capped water well northwest of the pad and south of the reserve pit

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New Mexico State Land Office
Jay Management Company SWD Site Delineation Phase II - Continued



Fencing installed as part of previous project



Fencing installed as part of previous project

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New Mexico State Land Office Jay Management Company SWD Site Delineation Phase II - Continued

MAPS

