Form 3160-3 (June 2015)

# Carlsbad Field Office Bonn APPROVED OF SOME No. 1004-0137

| June 2013)   | .c.                       | UCIDA   |              | Jan Jan                                | nuary 31, 2018                     |  |  |
|--|---------------------------|---|--------------|--|------------------------------------|--|--|
| UNITED STATE<br>DEPARTMENT OF THE  | :S<br>INTERIOR            |   | 71.168       | Silease Serial No.                     | <del></del>                        |  |  |
| BUREAU OF LAND MAN   | AGEMENT                   | Γ   |              | NMNM0002427                            |                                    |  |  |
| APPLICATION FOR PERMIT TO I  | DRILL OR                  | REENTER   |              | 6. If Indian, Allotee                  | or Tribe Name                      |  |  |
| Ia. Type of work: ✓ DRILL ☐ F  | REENTER                   | <del></del>   |              | 7. If Unit or CA Agre                  | eement, Name and No.               |  |  |
| lb. Type of Well: Oil Well Gas Well G  | Other                     |   |              | 8. Lease Name and Well No.             |                                    |  |  |
| 1c. Type of Completion: Hydraulic Fracturing   | Single Zone [             | ✓ Multiple Zone                                       |              | WEST SQUARE LAKE 34 FED O              |                                    |  |  |
|  |                           |   |              | 1 3229                                 |                                    |  |  |
| 2. Name of Operator<br>SEGURO OIL AND GAS LLC  |                           | 3720  | 66           | 9. API Well No.<br>30-61               |                                    |  |  |
| 3a. Address<br>407 N, Big Spring St. Suite 215 Midland TX 79702  | 3b. Phone N<br>(432)219-0 | lo. (include area cod<br>740                          | le)          | 10. Field and Pool, of SQUARE LAKE / S | or Exploratory<br>SAN ANDRES 57676 |  |  |
| 4. Location of Well (Report location clearly and in accordance   | -                         | •   |              | · ·                                    | Blk. and Survey or Area            |  |  |
| At surface LOT O / 990 FSL / 1650 FEL / LAT 32.873   |                           |   |              | SEC 34 / T16S / R30E / NMP             |                                    |  |  |
| At proposed prod. zone LOT O / 990 FSL / 1650 FEL / 1  | LAT 32.87348              | 368 / LONG -103.9                                     | 565336       |  |                                    |  |  |
| <ol> <li>Distance in miles and direction from nearest town or post of<br/>4 miles</li> </ol>   | ffice*                    |   |              | 12. County or Parish 13. State NM      |                                    |  |  |
| 15. Distance from proposed* location to nearest 990 feet   | 16. No of ac              | cres in lease   | 17. Spacii   | ng Unit dedicated to th                | nis well                           |  |  |
| property or lease line, ft. (Also to nearest drig. unit line, if any)  | 640                       |   | 40           |  |                                    |  |  |
| 18. Distance from proposed location* to nearest well, drilling, completed,   | 19. Propose               | d Depth   | 20. BLM/     | BIA Bond No. in file                   |                                    |  |  |
| applied for, on this lease, ft. 435 feet   | 3745 feet /               | 3745 feet   | FED: NM      | MB001590                               |                                    |  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)  3745 feet   | 22. Approxi               | mate date work will                                   | start*       | 23. Estimated duration 8 days          |                                    |  |  |
|  | 24. Attac                 | hments  |              |  |                                    |  |  |
| The following, completed in accordance with the requirements (as applicable)   | of Onshore Oil            | and Gas Order No.                                     | l, and the H | Hydraulic Fracturing ru                | ule per 43 CFR 3162.3-3            |  |  |
| Well plat certified by a registered surveyor.     A Drilling Plan.   |                           | 4. Bond to cover the Item 20 above).                  | ne operation | s unless covered by an                 | existing bond on file (see         |  |  |
| 3. A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office                          |                           | 5. Operator certific<br>6. Such other site sp<br>BLM. |              | mation and/or plans as                 | may be requested by the            |  |  |
| 25. Signature  | Name                      | (Printed/Typed)                                       |              |  | Date                               |  |  |
| (Electronic Submission)  | Donna                     | a Sturdivant / Ph: (                                  | 432)219-0    | 740                                    | 07/13/2018                         |  |  |
| Title<br>Regulatory Clerk  |                           |   |              |  |                                    |  |  |
| Approved by (Signature)  | Name                      | (Printed/Typed)                                       |              |  | Date                               |  |  |
| (Electronic Submission)  |                           | Layton / Ph: (575)2                                   | 234-5959     |  | 11/21/2018                         |  |  |
| Title<br>Assistant Field Manager Lands & Minerals  | 1                         | Office<br>CARLSBAD                                    |              |  |                                    |  |  |
| Application approval does not warrant or certify that the applica applicant to conduct operations thereon. Conditions of approval, if any, are attached. | ant holds legal           | or equitable title to th                              | hose rights  | in the subject lease wh                | nich would entitle the             |  |  |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, of the United States any false, fictitious or fraudulent statements                       |                           |   | · ·          | •                                      | ny department or agency            |  |  |
| NIM OIL CONSERVATION ARTESIA DISTRICT  | <del></del>               |   |              |  |                                    |  |  |
| NOV 29 2018  |                           | zovníl.   | IONS         |  |                                    |  |  |

RECEIVED (Continued on page 2)



\*(Instructions on page 2)

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48( d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

# **Additional Operator Remarks**

#### **Location of Well**

1. SHL: LOT O / 990 FSL / 1650 FEL / TWSP: 16S / RANGE: 30E / SECTION: 34 / LAT: 32.8734868 / LONG: -103.9565336 ( TVD: 4393 feet, MD: 4393 feet )
BHL: LOT O / 990 FSL / 1650 FEL / TWSP: 16S / RANGE: 30E / SECTION: 34 / LAT: 32.8734868 / LONG: -103.9565336 ( TVD: 3745 feet, MD: 3745 feet )

#### **BLM Point of Contact**

Name: Sipra Dahal

Title: Legal Instruments Examiner

Phone: 5752345983 Email: sdahal@blm.gov

(Form 3160-3, page 3)

# **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

(Form 3160-3, page 4)

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | SEGURO OIL AND GAS LLC

LEASE NO.: | NMNM0002427

WELL NAME & NO.: | 1:WEST SQUARE LAKE 34 FED O

SURFACE HOLE FOOTAGE: 990'/S & 1650'/E BOTTOM HOLE FOOTAGE 990'/S & 1650'/E

LOCATION: | T-16S, R-30E, S34. NMPM

COUNTY: | EDDY, NM

| Potash               | © None         | C Secretary   | ← R-111-P      |
|----------------------|----------------|---------------|----------------|
| Cave/Karst Potential | € Low          |               | ← High         |
| Variance             | • None         | ← Flex Hose   | <b>○</b> Other |
| Wellhead             | © Conventional | Multibowl     |                |
| Other                | ☐4 String Area | ☐Capitan Reef | □WIPP          |

#### A. Hydrogen Sulfide

1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Yates** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### **B. CASING**

- 1. The 8 5/8 inch surface casing shall be set at approximately 380 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength,

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whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 5 1/2 inch production casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.

#### C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.

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# **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Chaves and Roosevelt Counties
    Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
    During office hours call (575) 627-0272.
    After office hours call (575)
  - Eddy County
    Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - ☐ Lea County
    Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
    393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

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8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after

installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
DESCRIPTION SEGURO OIL AND GAS LLC
NMNM0002425
1:WEST SQUARE LAKE 34 FED O
990'/S & 1650'/E
990'/S & 1650'/E
T-16S, R-30E, S34. NMPM
EDDY, NM

#### **TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

| General Provisions                              |
|---|
| Permit Expiration                               |
| Archaeology, Paleontology, and Historical Sites |
| ☐ Noxious Weeds                                 |
| Special Requirements                            |
| Wildlife Mitigation Measures                    |
| Watershed/Hydrology Mitigation Measures         |
| ☐ Construction                                  |
| Notification                                    |
| Topsoil   |
| Closed Loop System                              |
| Federal Mineral Material Pits                   |
| Well Pads                                       |
| Roads   |
| Road Section Diagram                            |
| □ Production (Post Drilling)                    |
| Well Structures & Facilities                    |
| Interim Reclamation                             |
| Final Abandonment & Reclamation                 |

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#### I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

#### II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

# III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

#### IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

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# V. SPECIAL REQUIREMENT(S)

#### **Wildlife Mitigation Measures:**

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

#### **Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

#### Ground-level Abandoned Well Marker to avoid raptor perching:

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

#### Watershed/Hydrology Mitigation Measures:

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the

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fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

#### CONSTRUCTION

#### A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

#### B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

Page 4 of 12

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

#### F. EXCLOSURE FENCING (CELLARS & PITS)

#### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### G. ON LEASE ACCESS ROADS

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future

Page 5 of 12

field development. The surfacing depth and type of material will be determined at the time of notification.

#### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

## **Ditching**

Ditching shall be required on both sides of the road.

#### **Turnouts**

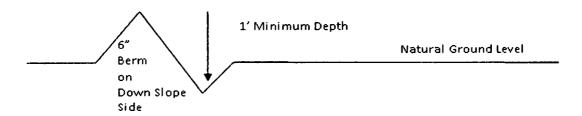
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

#### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

#### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:  $\frac{400'}{4\%}$  + 100' = 200' lead-off ditch interval

Page 6 of 12

#### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

#### Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

#### **Livestock Watering Requirement**

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Page 7 of 12

# **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road 4. Revegetate slopes

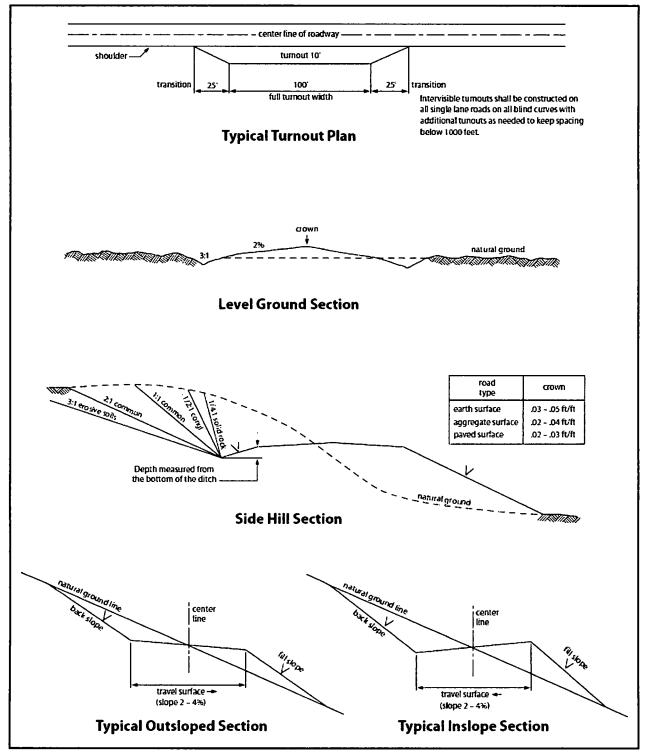


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

# VI. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

# Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Page 9 of 12

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

# VRM Facility Requirement Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### VII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

#### VIII. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory

Page 10 of 12

revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Page 11 of 12

#### Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

| Species             | <u>lb/acre</u> |
|---------------------|----------------|
| Plains Bristlegrass | 5lbs/A         |
| Sand Bluestem       | 5lbs/A         |
| Little Bluestem     | 3lbs/A         |
| Big Bluestem        | 6lbs/A         |
| Plains Coreopsis    | 2lbs/A         |
| Sand Dropseed       | 1lbs/A         |

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



# **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Donna Sturdivant Signed on: 07/11/2018

Title: Regulatory Clerk

Street Address: 407 N, Big Spring St. Suite 215

City: Midland State: TX Zip: 79702

Phone: (432)219-0740

Email address: dmsreg2014@yahoo.com

## Field Representative

Representative Name: STEPHEN ANDERSON

Street Address: 407 N BIG SPRING STREET, SIUTE 215

City: MIDLAND State: TX Zip: 79701

Phone: (432)219-0740

Email address: PAUL@SEGURO-LLC.COM



#### U.S. Department of the Interior **BUREAU OF LAND MANAGEMENT**



APD ID: 10400031882

Submission Date: 07/13/2018

Operator Name: SEGURO OIL AND GAS LLC

Well Name: WEST SQUARE LAKE 34 FED O

Well Type: OIL WELL

Well Number: 1

Well Work Type: Drill



**Show Final Text** 

#### Section 1 - General

APD ID:

10400031882

**Tie to previous NOS?** 10400027775

Submission Date: 07/13/2018

**BLM Office: CARLSBAD** 

User: Donna Sturdivant

Title: Regulatory Clerk

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM0002427

Lease Acres: 640

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

**Permitting Agent? YES** 

APD Operator: SEGURO OIL AND GAS LLC

Operator letter of designation:

# **Operator Info**

Operator Organization Name: SEGURO OIL AND GAS LLC

Operator Address: 407 N, Big Spring St. Suite 215

**Zip**: 79702

Operator PO Box: PO Box 3176

**Operator City: Midland** 

State: TX

**Operator Phone:** (432)219-0740

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: WEST SQUARE LAKE 34 FED O

Well Number: 1

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: SQUARE LAKE

**Pool Name: SAN ANDRES** 

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Well Name: WEST SQUARE LAKE 34 FED O

Well Number: 1

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: VERTICAL

Number of Legs: 1

Well Work Type: Drill Well Type: OIL WELL

**Describe Well Type:** 

Well sub-Type: EVALUATION

Describe sub-type:

Distance to town: 4 Miles

Distance to nearest well: 435 FT

Distance to lease line: 990 FT

Reservoir well spacing assigned acres Measurement: 40 Acres

Well plat: WSL\_34\_Federal\_O\_1\_Plat\_20180711090734.pdf

Well work start Date: 08/01/2018

**Duration: 8 DAYS** 

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

|     | NS-Foot | NS Indicator | EW-Foot | EW Indicator | Twsp | Range | Section | Aliquot/Lot/Tract | Latitude | Longitude | County | State . | Meridian | Lease Type |        | Elevation | MD  | DVT |
|-----|---------|--------------|---------|--------------|------|-------|---------|-------------------|----------|-----------|--------|---------|----------|------------|--------|-----------|-----|-----|
| SHL | 990     | FSL          | 165     | FEL          | 16S  | 30E   | 34      | Lot               | 32.87348 | -         | EDD    | NEW     | NEW      | F          | NMNM   | 374       | 439 | 439 |
| Leg |         |              | 0       |              |      |       |         | 0                 | 68       | 103.9565  | Υ      | MEXI    |          |            | 000242 | 5         | 3   | 3   |
| #1  |         |              |         |              |      |       |         |                   |          | 336       |        | co      | co       |            | 7      |           |     |     |
| BHL | 990     | FSL          | 165     | FEL          | 16S  | 30E   | 34      | Lot               | 32.87348 | _         | EDD    | NEW     | NEW      | F          | NMNM   | 0         | 374 | 374 |
| Leg |         |              | 0       |              |      |       |         | 0                 | 68       | 103.9565  | Υ      | MEXI    | MEXI     |            | 000242 |           | 5   | 5   |
| #1  |         |              |         |              |      |       |         |                   |          | 336       |        | co      | СО       |            | 7      |           |     |     |



#### U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report 11/27/2018

APD ID: 10400031882

Submission Date: 07/13/2018

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Operator Name: SEGURO OIL AND GAS LLC

Well Number: 1

**Show Final Text** 

Well Name: WEST SQUARE LAKE 34 FED O Well Type: OIL WELL

Well Work Type: Drill

# **Section 1 - Geologic Formations**

| Formation ID | Formation Name   | Elevation | True Vertical<br>Depth | Measured<br>Depth            | Lithologies            | Mineral Resources | Producing Formation |
|--------------|------------------|-----------|------------------------|------------------------------|------------------------|-------------------|---------------------|
| 1            | QUATERNARY       |           |                        | OTHER : Eolian Sand<br>Dunes | USEABLE WATER          | No                |                     |
| 2            | RUSTLER          | 3435      | 310                    | 310                          | ANHYDRITE              | POTASH            | No                  |
| 3            | TOP SALT         | 3225      | 520                    | 520                          | SALT POTASH            |                   | No                  |
| 4            | BASE OF SALT     | 2495      | 1250                   | 1250                         | SALT                   | POTASH            | No                  |
| 5            | YATES            | 2340      | 1405                   | 1405                         | SANDSTONE              | NATURAL GAS       | No                  |
| 6            | 6 SEVEN RIVERS   |           | 1665                   | 1665                         | DOLOMITE               | NATURAL GAS,OIL   | No                  |
| 7            | 7 QUEEN          |           | 2280                   | 2280                         | SANDSTONE              | NATURAL GAS,OIL   | No                  |
| 8            | PENROSE          | 1260      | 2485                   | 2485 DOLOMITE                |                        | NATURAL GAS,OIL   | No                  |
| 9            | GRAYBURG         | 1035      | 2710                   | 2710                         | SANDSTONE,DOLOMIT<br>E | NATURAL GAS,OIL   | No                  |
| 10           | LOCO             | 910       | 2835                   | 2835                         | SANDSTONE              | NATURAL GAS,OIL   | No                  |
| 11           | 11 METEX         |           | 2880                   | 2880                         | SANDSTONE              | NATURAL GAS,OIL   | No                  |
| 12           | 12 PREMIER       |           | 2975                   | 2975                         | SANDSTONE              | NATURAL GAS,OIL   | No                  |
| 13           | SAN ANDRES UPPER | 745       | 3000                   | 3000                         | DOLOMITE               | NATURAL GAS,OIL   | Yes                 |
| 14           | LOVINGTON        |           | 3095                   | 3095                         | SANDSTONE              | NATURAL GAS,OIL   | No                  |
| 15           | SAN ANDRES       | 201       | 3544                   | 3544                         | DOLOMITE               | NATURAL GAS,OIL   | Yes                 |

# **Section 2 - Blowout Prevention**



#### HYDROGEN SULFIDE (H2S) DRILLING OPERATIONS PLAN

#### **Hydrogen Sulfide Training:**

All regularly assigned personnel, contracted or employed by Seguro Oil and Gas, LLC will receive training from qualified instructor(s) in the following areas prior to commencing drilling possible hydrogen sulfide bearing formations in this well:

- The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
- The proper use and maintenance of personal protective equipment and life support systems.
- The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing area, evacuation procedures & prevailing winds.
- The proper techniques for first aid and rescue procedures.

# Supervisory personnel will be trained in the following areas:

- The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be utilized, personnel will be trained in their special maintenance requirements.
- Corrective action & Shut-in procedures when drilling or reworking a well & blowout prevention / well control
  procedures.
- The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan

#### H₂S SAFETY EQUIPMENT AND SYSTEMS:

#### Well Control Equipment that will be available & installed if H2S is encountered:

- Flare Line with electronic igniter or continuous pilot.
- Choke manifold with a minimum of remote choke.
- Blind rams & pipe rams to accommodate all pipe sizes with properly sized closing unit.
- Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head & flare gun with flares

#### **Protective Equipment for Essential Personnel:**

• Mark II Survive-air 30-minute units located in dog house & at briefing areas, as indicated on wellsite diagram.

#### **H2S Detection and Monitoring Equipment:**

- Two portable H<sub>2</sub>S monitors positioned on location for best coverage & response. These units have warning lights & audible sirens when H<sub>2</sub>S levels of 20 ppm are reached.
- One portable H<sub>2</sub>S monitor positioned near flare line.

#### **H2S Visual Warning Systems:**

Wind direction indicators are shown on wellsite diagram.

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• Caution / Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black letter of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

#### **Mud Program:**

• The Mud Program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weights, safe drilling practices & the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

#### Metallurgy:

- All drill strings, casing, tubing, wellhead, blowout prevents, drilling spool, kill lines, choke manifold & lines, & valves will be suitable for H<sub>2</sub>S service.
- All elastomers used for packing & seals shall be H<sub>2</sub>S trim.

#### **Communication:**

• Cellular telephone and 2-way radio communications in company vehicles, rig floor and mud logging trailer.



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



APD ID: 10400031882

**Operator Name: SEGURO OIL AND GAS LLC** 

Well Name: WEST SQUARE LAKE 34 FED O

Well Type: OIL WELL

Submission Date: 07/13/2018

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Well Number: 1

#### **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

WSL\_34\_Federal\_O\_1\_Roads\_20180711094709.pdf WSL\_34\_Federal\_O\_1\_Location\_20180711122234.pdf

**Existing Road Purpose: ACCESS** 

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

WSL\_34\_Federal\_O\_1\_Proposed\_Road\_Map\_20180711122528.pdf

#### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

WSL\_34\_Federal\_O\_1\_Proposed\_Road\_Map\_20180711123648.pdf

**New road type: RESOURCE** 

Length: 175.336

Feet

Width (ft.): 30

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 30

New road access erosion control: Road will be crowned for water drainage and to to control erosion

New road access plan or profile prepared? NO

New road access plan attachment:

Well Name: WEST SQUARE LAKE 34 FED O

Well Number: 1

### **Seed Management**

**Seed Table** 

Seed type: Seed source:

Seed name:

Source name: Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre: Proposed seeding season:

Seed Summary
Seed Type Pounds/Acre

Total pounds/Acre:

#### Seed reclamation attachment:

# **Operator Contact/Responsible Official Contact Info**

First Name: Paul Last Name: Anderson

Phone: (432)219-0740 Email: paul@seguro-llc.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

**Existing invasive species treatment attachment:** 

**Weed treatment plan description:** Operator will consult with authorized officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

Weed treatment plan attachment:

**Monitoring plan description:** Interim reclamation, reclaimed areas, will be monitored periodically to insure vegetation has re-established, that area is not redisturbed, and erosion is controlled.

Monitoring plan attachment:

**Success standards:** Objective of interim reclamation is to restore vegetative cover and a portion of land form to maintain healthy, biologically active topsoil, control erosion and minimize habitat and forage loss, visual impact, and weed infestation during life of well or facilities.

Pit closure description: Not Applicable

Pit closure attachment:

Well Name: WEST SQUARE LAKE 34 FED O

Well Number: 1

# **Section 11 - Surface Ownership**

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

**Other Local Office:** 

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS Ranger District:** 

# **Section 12 - Other Information**

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

# **ROW Applications**

SUPO Additional Information: Power to be provided by Central Valley Electric

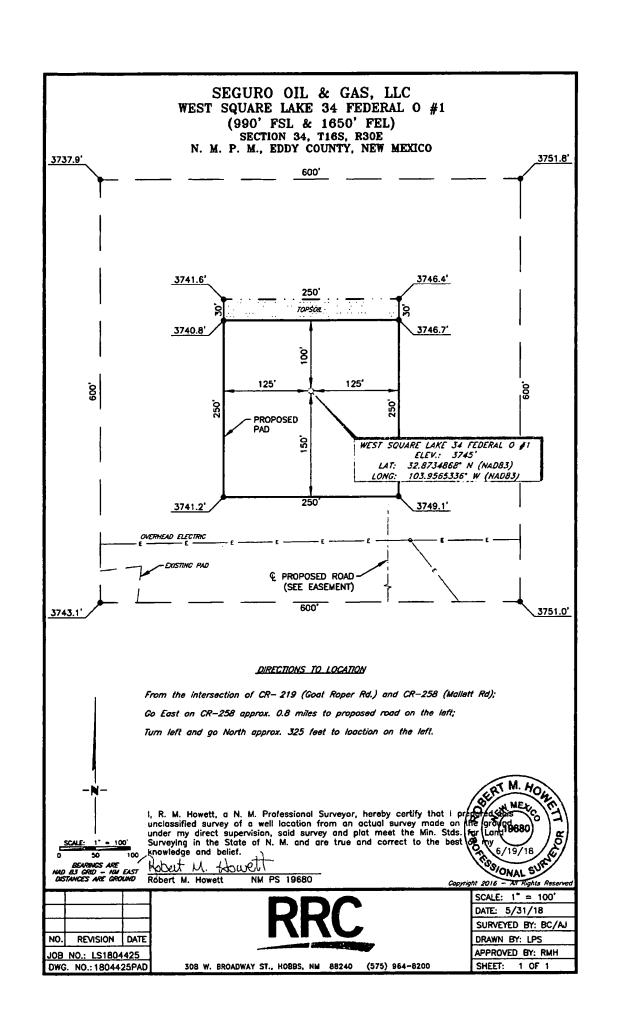
Use a previously conducted onsite? NO

**Previous Onsite information:** 

**Other SUPO Attachment** 

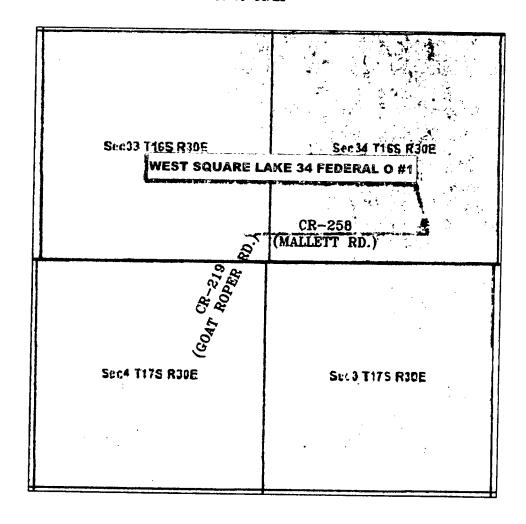
Well Name: WEST SQUARE LAKE 34 FED O Well Number: 1

GasCapturePlan\_WSL\_34\_O\_1\_20181012111852.docx



# VICINITY MAP

NOT TO SCALE



SECTION 34, TWP. 16 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Seguro Oil & Gas, LLC

LEASE: West Square Lake 34 Federal O ELEVATION: 3745'

WELL NO.: \_\_1\_

LOCATION: 990' FSL & 1650' FEL

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NO. REVISION DATE JOB NO.: LS1804425 DWG. NO.: 1804425VM

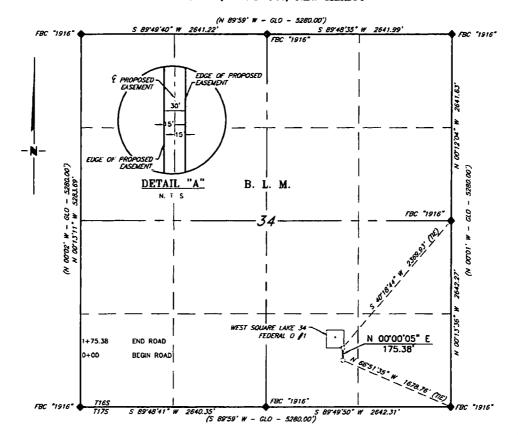


308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S. DATE: 5-31-2018 SURVEYED BY: BC/AJ DRAWN BY: LPS APPROVED BY: RMH

SHEET: 1 OF 1

#### SEGURO OIL & GAS, LLC PROPOSED ACCESS ROAD FOR THE WEST SQUARE LAKE 34 FEDERAL O #1 SECTION 34, T16S, R30E, N. M. P. M., EDDY CO., NEW MEXICO



#### DESCRIPTION

A strip of land 30 feet wide, being 175.38 feet or 10.629 rods in length, lying in Section 34, Township 16 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 34, which bears, N 66'51'35" W, 1,678.76 feet from a brass cap, stamped "1916", found for the Southeast corner of Section 34;

Thence N 00'00'05" E, 175.38 feet, to Engr. Sta. 1+75.38, the End of Survey, a point in the Southeast quarter of Section 34, which bears, S 40'18'44" W, 2,369.93 feet from a brass cap, stamped "1916", found for the East quarter corner of Section 34.

Said strip of land contains 0.121 acres, more or less, and is allocated by forties as follows:

SW 1/4 SE 1/4

10.629 Rods

= 1000 1000

BEARINGS ARE GRID NAD 83 NIN EAST DISTANCES ARE HORIZ. GROUND.

RECORD DATA - GLO FOUND MONUMENT AS NOTED

PROPOSED ACCESS

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, soid survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Hobert M. Howell

Robert M. Howett

NM PS 19680



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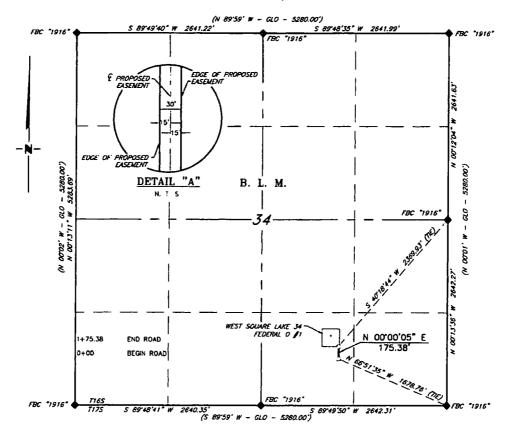
NO. REVISION DATE JOB NO.: LS1804425 DWG. NO.: 1804425RD



308 W. BROADWAY ST., HOBBS, NM 88240 (575) 984-8200

SCALE: 1" = 1000" DATE: 5-31-2018 SURVEYED BY: BC/AJ DRAWN BY: LPS APPROVED BY: RMH SHEET: 1 OF 1

#### SEGURO OIL & GAS, LLC PROPOSED ACCESS ROAD FOR THE WEST SQUARE LAKE 34 FEDERAL O #1 SECTION 34, T16S, R30E, N. M. P. M., EDDY CO., NEW MEXICO



#### DESCRIPTION

A strip of land 30 feet wide, being 175.38 feet or 10.629 rods in length, lying in Section 34, Township 16 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

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SW 1/4 SE 1/4

10.629 Rods

0.121 Acres

1" = 1000" 500 1000

BEARINGS ARE GRID NAD 83 NIM EAST DISTANCES ARE HORIZ, GROUND.

LEGEND

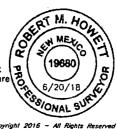
RECORD DATA - GLO FOUND MONUMENT AS NOTED

PROPOSED ACCESS

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell

Robert M. Howett NM PS 19680



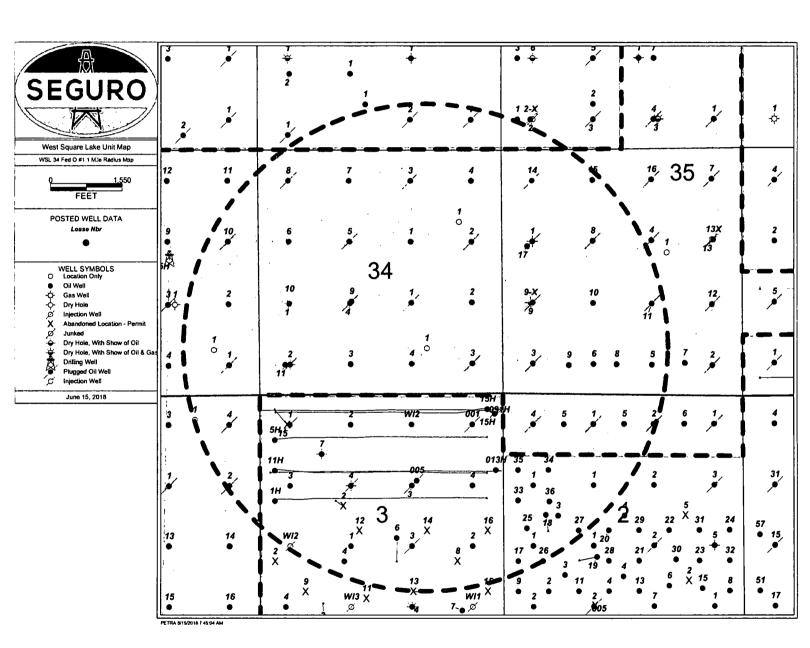
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NO. REVISION DATE JOB NO.: LS1804425 DWG. NO.: 1804425RD

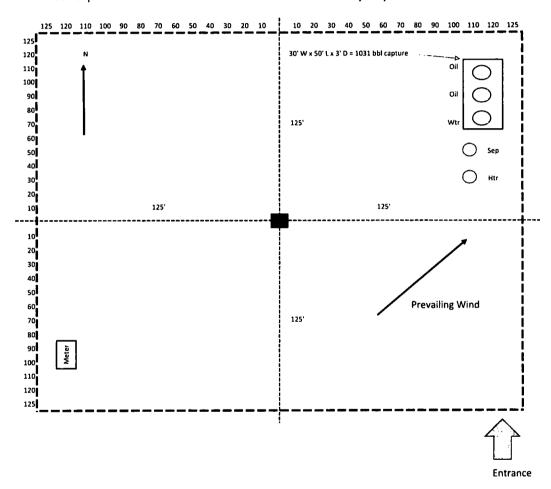


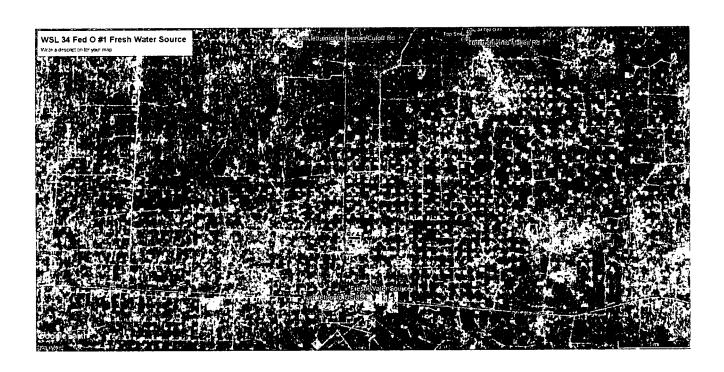
308 W. BROADWAY ST., HOBBS, NM BB240 (575) 964-8200

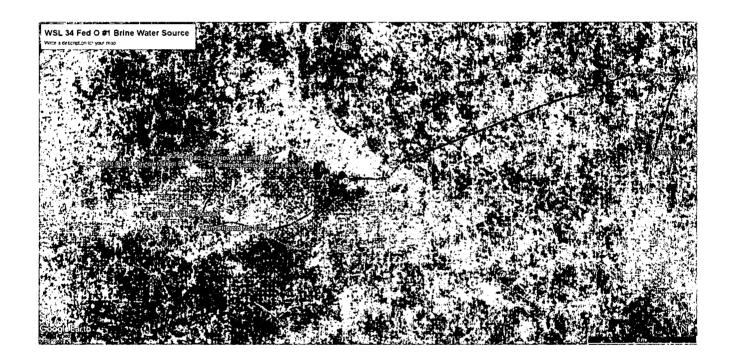
SCALE: 1" = 1000 DATE: 5-31-2018 SURVEYED BY: BC/AJ DRAWN BY: LPS APPROVED BY: RMH SHEET: 1 OF 1

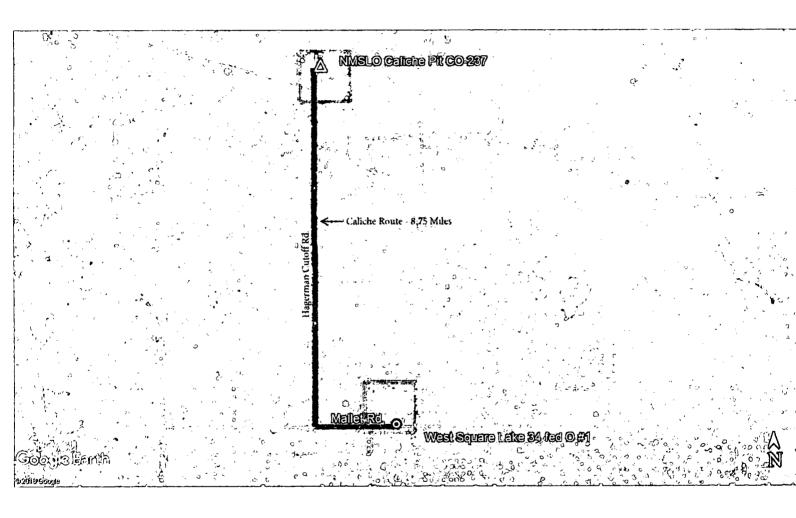


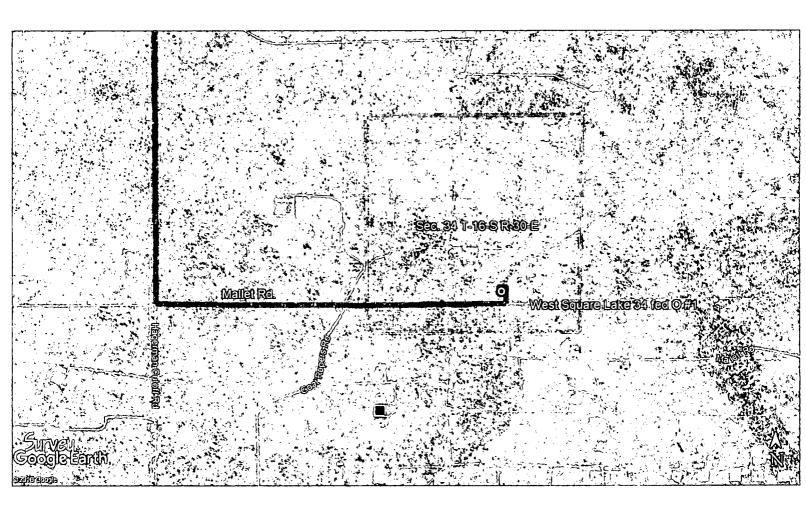
## West Square Lake 34 Fed O # 1 - Production Facility Layout

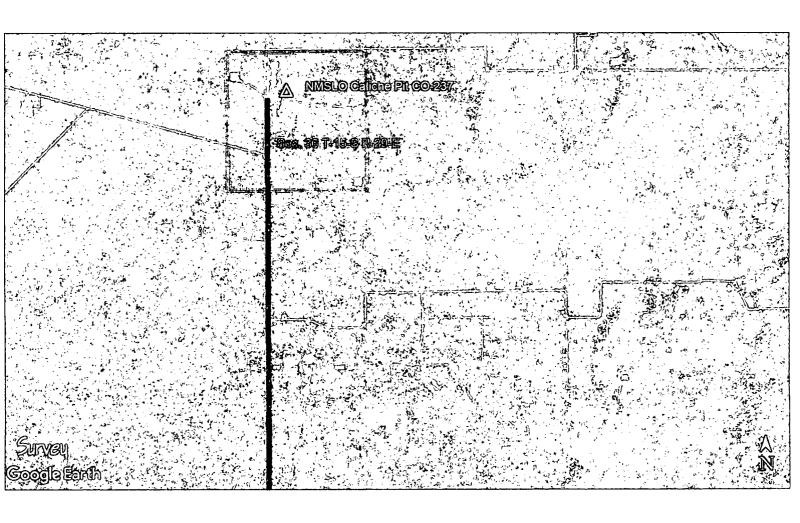




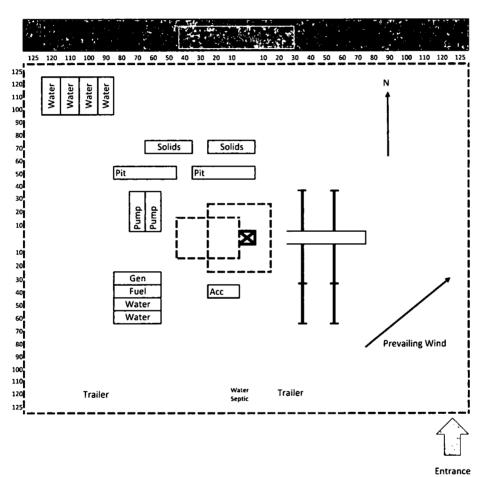








West Square Lake 34 Fed O # 1 - United Rig # 35



| Produced Water Disposal (PWD) Location: ONLEASE               |                          |
|---|--------------------------|
| PWD surface owner: BLM  | PWD disturbance (acres): |
| Lined pit PWD on or off channel:                              |                          |
| Lined pit PWD discharge volume (bbl/day):                     |                          |
| Lined pit specifications:                                     |                          |
| Pit liner description:  |                          |
| Pit liner manufacturers information:                          |                          |
| Precipitated solids disposal:                                 |                          |
| Decribe precipitated solids disposal:                         |                          |
| Precipitated solids disposal permit:                          |                          |
| Lined pit precipitated solids disposal schedule:              |                          |
| Lined pit precipitated solids disposal schedule attachment:   |                          |
| Lined pit reclamation description:                            |                          |
| Lined pit reclamation attachment:                             |                          |
| Leak detection system description:                            |                          |
| Leak detection system attachment:                             |                          |
| Lined pit Monitor description:                                |                          |
| Lined pit Monitor attachment:                                 |                          |
| Lined pit: do you have a reclamation bond for the pit? Y      |                          |
| Is the reclamation bond a rider under the BLM bond? Y         |                          |
| Lined pit bond number:  |                          |
| Lined pit bond amount:  |                          |
| Additional bond information attachment:                       |                          |
| Section 3 - Unlined Pits                                      |                          |
| Would you like to utilize Unlined Pit PWD options? NO         |                          |
| Produced Water Disposal (PWD) Location: ONLEASE               |                          |
| PWD surface owner:  | PWD disturbance (acres): |
| Unlined pit PWD on or off channel:                            |                          |
| Unlined pit PWD discharge volume (bbl/day):                   |                          |
| Unlined pit specifications:                                   |                          |
| Precipitated solids disposal:                                 |                          |
| Decribe precipitated solids disposal:                         |                          |
| Precipitated solids disposal permit:                          |                          |
| Unlined pit precipitated solids disposal schedule:            |                          |
| Unlined pit precipitated solids disposal schedule attachment: |                          |
| Unlined pit reclamation description:                          |                          |

Unlined pit reclamation attachment:

| Offinied pit Monitor description.   |  |
|---|--|
| Unlined pit Monitor attachment:   |  |
| Do you propose to put the produced water to beneficial use?   | YES .  |
| Beneficial use user confirmation:   |  |
| Estimated depth of the shallowest aquifer (feet):   |  |
| Does the produced water have an annual average Total Dissol that of the existing water to be protected? Y           | ved Solids (TDS) concentration equal to or less than |
| TDS lab results:  |  |
| Geologic and hydrologic evidence:   |  |
| State authorization:  |  |
| Unlined Produced Water Pit Estimated percolation:   |  |
| Unlined pit: do you have a reclamation bond for the pit? Y  |  |
| Is the reclamation bond a rider under the BLM bond? Y   |  |
| Unlined pit bond number:  |  |
| Unlined pit bond amount:  |  |
| Additional bond information attachment:   |  |
| Section 4 - Injection  Would you like to utilize Injection PWD options? NO  Produced Water Disposal (PWD) Location: |  |
| PWD surface owner:  | PWD disturbance (acres):                             |
| Injection PWD discharge volume (bbl/day):   | (and and and and and and and and and and             |
| Injection well mineral owner:   |  |
| Injection well type:  |  |
| Injection well number:  | Injection well name:                                 |
| Assigned injection well API number?   | Injection well API number:                           |
| Injection well new surface disturbance (acres):   | •  |
| Minerals protection information:  |  |
| Mineral protection attachment:  |  |
| Underground Injection Control (UIC) Permit? YES   |  |
| UIC Permit attachment:  |  |
| Section 5 - Surface Discharge   |  |
| Would you like to utilize Surface Discharge PWD options? NO   |  |
| Produced Water Disposal (PWD) Location:   |  |
| PWD surface owner:  | PWD disturbance (acres):                             |
| Surface discharge PWD discharge volume (bbl/day):   |  |
| Surface Discharge NPDES Permit? N   |  |

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities imormation:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met? Y

Other regulatory requirements attachment:



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

## **Bond Information**

Federal/Indian APD: FED

**BLM Bond number: NMB001590** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

**BLM** reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

**Reclamation bond amount:** 

Reclamation bond rider amount:

Additional reclamation bond information attachment:

