Carlsbad Fie d Office
OCD Hobbs

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD
JAN 16 2019
RECEIVED

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NMNM120907
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☑ Other INJ-DIS	6. If Indian, Allotee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone	7. If Unit or CA Agreement, Name and No.
	8. Lease Name and Well No. GOLD COAST 26 FEDERAL 3 (323149)
2. Name of Operator OWL SWD OPERATING LLC (308339)	9. API Well No. 30-025-45514
3a. Address 8214 Westchester Drive, Suite 850 Dallas TX 75225	3b. Phone No. *(include area code)* (432)234-0427
	10. Field and Pool, or Exploratory ~~PADUCA NORTH~~ / DEVONIAN-SILURIAI (97869)
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface LOT F / 2612 FSL / 2643 FWL / LAT 32.1886774 / LONG -103.6454409 At proposed prod. zone LOT F / 2612 FSL / 2643 FWL / LAT 32.1886774 / LONG -103.6454409	11. Sec., T. R. M. or Blk. and Survey or Area SEC 26 / T24S / R32E / NMP

14. Distance in miles and direction from nearest town or post office* 27.1 miles		12. County or Parish LEA	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2643 feet	16. No of acres in lease 1840	17. Spacing Unit dedicated to this well 0	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3000 feet	19. Proposed Depth 19000 feet / 19000 feet	20. BLM/BIA Bond No. in file FED: NMB001181	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3563 feet	22. Approximate date work will start* 10/01/2018	23. Estimated duration 70 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature (Electronic Submission)	Name *(Printed/Typed)* Ben Stone / Ph: (903)488-9850	Date 02/23/2018
Title Agent		
Approved by *(Signature)* (Electronic Submission)	Name *(Printed/Typed)* Ty Allen / Ph: (575)234-5978	Date 11/30/2018
Title Wildlife Biologist	Office CARLSBAD	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CAN NOT DISPOSE UNTIL MIT PASS

KG 01/17/19

APPROVED WITH CONDITIONS

REQUIRES C-108 approval

Approval Date: 11/30/2018

(Continued on page 2)

*(Instructions on page 2)

Double sided

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.

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Additional Operator Remarks

Location of Well

1. SHL: LOT F / 2612 FSL / 2643 FWL / TWSP: 24S / RANGE: 32E / SECTION: 26 / LAT: 32.1886774 / LONG: -103.6454409 (TVD: 19000 feet, MD: 19000 feet)
   BHL: LOT F / 2612 FSL / 2643 FWL / TWSP: 24S / RANGE: 32E / SECTION: 26 / LAT: 32.1886774 / LONG: -103.6454409 (TVD: 19000 feet, MD: 19000 feet)

BLM Point of Contact

Name: Judith Yeager

Title: Legal Instruments Examiner

Phone: 5752345936

Email: jyeager@blm.gov

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.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**OWL SWD OPERATING, LLC**
LEASE NO.:	**NMNM120907**
WELL NAME & NO.:	**Gold Coast 26 Federal 3**
SURFACE HOLE FOOTAGE:	**2548' FSL & 2607' FWL**
BOTTOM HOLE FOOTAGE	**' F L & ' F L**
LOCATION:	**Section 26, T. 24 S., R 32 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	◉ Conventional	○ Multibowl	
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

A. Hydrogen Sulfide

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **20** inch surface casing shall be set at approximately **1090** 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,

whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **13 3/8** inch intermediate casing is:

   - Cement to surface. If cement does not circulate see B.1.a, c-d above.

3. The minimum required fill of cement behind the **9 5/8** inch production casing is:

   Operator has proposed a DV tool at a depth of **5700'**, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

   a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

   b. Second stage above DV tool:

      - Cement to surface. Operator shall provide method of verification. **Excess calculates to 23% - additional cement might be required.**

4. The minimum required fill of cement behind the **7** inch production liner is:

   - Cement should tie-back at least **100** feet into previous casing string. Operator shall provide method of verification. **Excess calculates to 1% - additional cement will be required.**

5. **Open hole completion from 17050 to 19000.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi.

D. WELL COMPLETION

The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on open-hole logs. If hydrocarbon shows occur while drilling, the operator shall notify the BLM.

The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open hole logs from TD to top of Devonian

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. **Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.**
2. **Restrict the injection fluid to the approved formation.**
3. **If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval**

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

MHH 11192018

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 2nd 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.

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.

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.

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OWL SWD Operating, LLC
LEASE NO.:	NMNM120907
WELL NAME & NO.:	Gold Coast 26 Federal 3
SURFACE HOLE FOOTAGE:	2548'/S & 2607'/W
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 26, T.24 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

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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.

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.

V. SPECIAL REQUIREMENT(S)

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, 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 feet 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

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

Storage facilities 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. The 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.

VI. 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.

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 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.

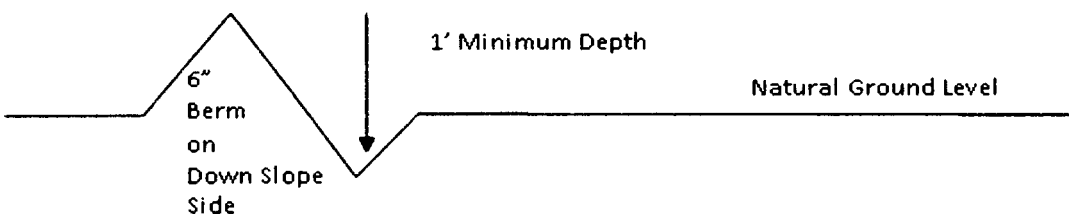
Ditching
Ditching shall be required on both sides of the road.

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:

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

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.

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

Construction Steps

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

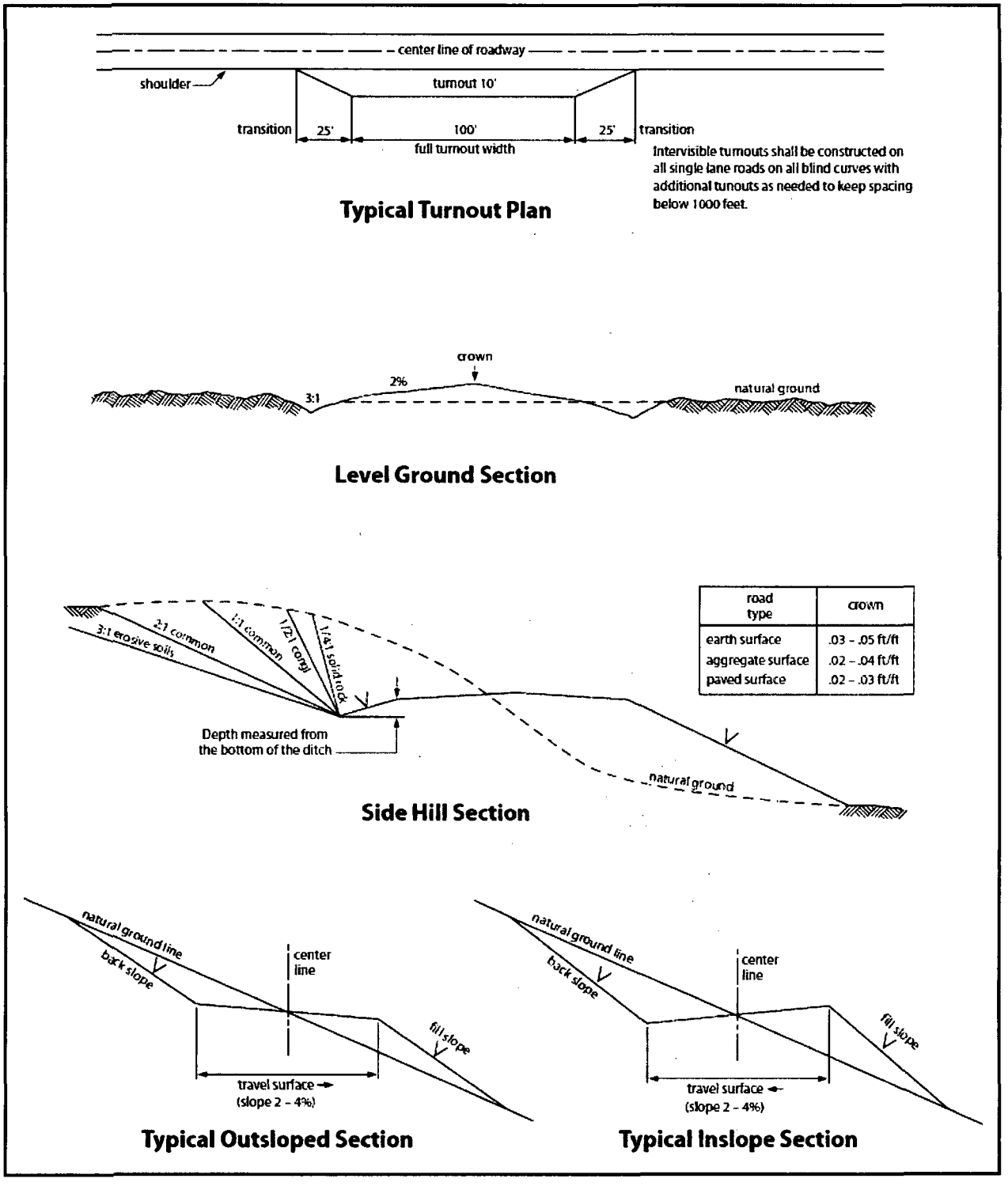


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. 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 1 ½ 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.

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.

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).

VIII. 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).

IX. 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 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.

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 no 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	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

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

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

Operator Certification Data Report

12/03/2018

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: Ben Stone **Signed on:** 08/24/2018

Title: Agent

Street Address: 1950 County Road

City: Como **State:** TX **Zip:** 75431

Phone: (903)488-9850

Email address: ben@sosconsulting.us

Field Representative

Representative Name: Michael Brandon

Street Address: 200 North Loraine Suite 206

City: Midland **State:** TX **Zip:** 79701

Phone: (432)661-3035

Email address: mbrandon@oilfieldwaterlogistics.com

AFMSS

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

Application Data Report

12/03/2018

APD ID: 10400024188 **Submission Date:** 02/23/2018

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Highlighted data reflects the most recent changes

Show Final Text

Well Type: INJECTION - DISPOSAL **Well Work Type:** Drill

Section 1 - General

APD ID: 10400024188 **Tie to previous NOS?** **Submission Date:** 02/23/2018

BLM Office: CARLSBAD **User:** Ben Stone **Title:** Agent

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM120907 **Lease Acres:** 1840

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:** OWL SWD OPERATING LLC

Operator letter of designation: Designation_of_Agent_20180220121141.pdf

Operator Info

Operator Organization Name: OWL SWD OPERATING LLC

Operator Address: 8214 Westchester Drive, Suite 850 **Zip:** 75225

Operator PO Box:

Operator City: Dallas **State:** TX

Operator Phone: (432)234-0427

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: GOLD COAST 26 FEDERAL **Well Number:** 3 **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** PADUCA NORTH **Pool Name:** DEVONIAN-SILURIAN

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

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

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: INJECTION - DISPOSAL

Describe Well Type:

Well sub-Type: INJECTION - DISPOSAL

Describe sub-type:

Distance to town: 27.1 Miles **Distance to nearest well:** 3000 FT **Distance to lease line:** 2643 FT

Reservoir well spacing assigned acres Measurement: 0 Acres

Well plat: GOLD_COAST_C102_8_23_18_20180823115644.pdf

OWLL_B180009_LOCATION_AERIAL_20180824145953.pdf

OWLL_B180009_LOCATION_SITE_20180824145954.pdf

OWLL_B180009_LOCATION_TOPO_20180824145955.pdf

OWLL_B180009_ACCESS_MAP_20180824145949.pdf

OWLL_B180009_VICINITY_MAP_20180824145959.pdf

Well work start Date: 10/01/2018 **Duration:** 70 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: B18OWLL0009

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	2612	FSL	2643	FWL	24S	32E	26	Lot F	32.1886774	-103.6454409	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 120907	3563	19000	19000

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
BHL Leg #1	2612	FSL	2643	FWL	24S	32E	26	Lot F	32.1886774	-103.6454409	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 120907	3563	19000	19000

OWL

Oilfield Water Logistics

DESIGNATION OF AGENT

DATE: September 18, 2014

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
620 E. GREENE STREET
CARLSBAD, NM 88220

Re: Agent Authorization

Gentlemen:

Please be informed that Ben Stone is an Agent employed by SOS Consulting, LLC. He is authorized to prepare and submit APDs, Sundry Notices, Completion Forms, Right of Way applications, and other BLM-required forms on behalf of, and as directed by our company.

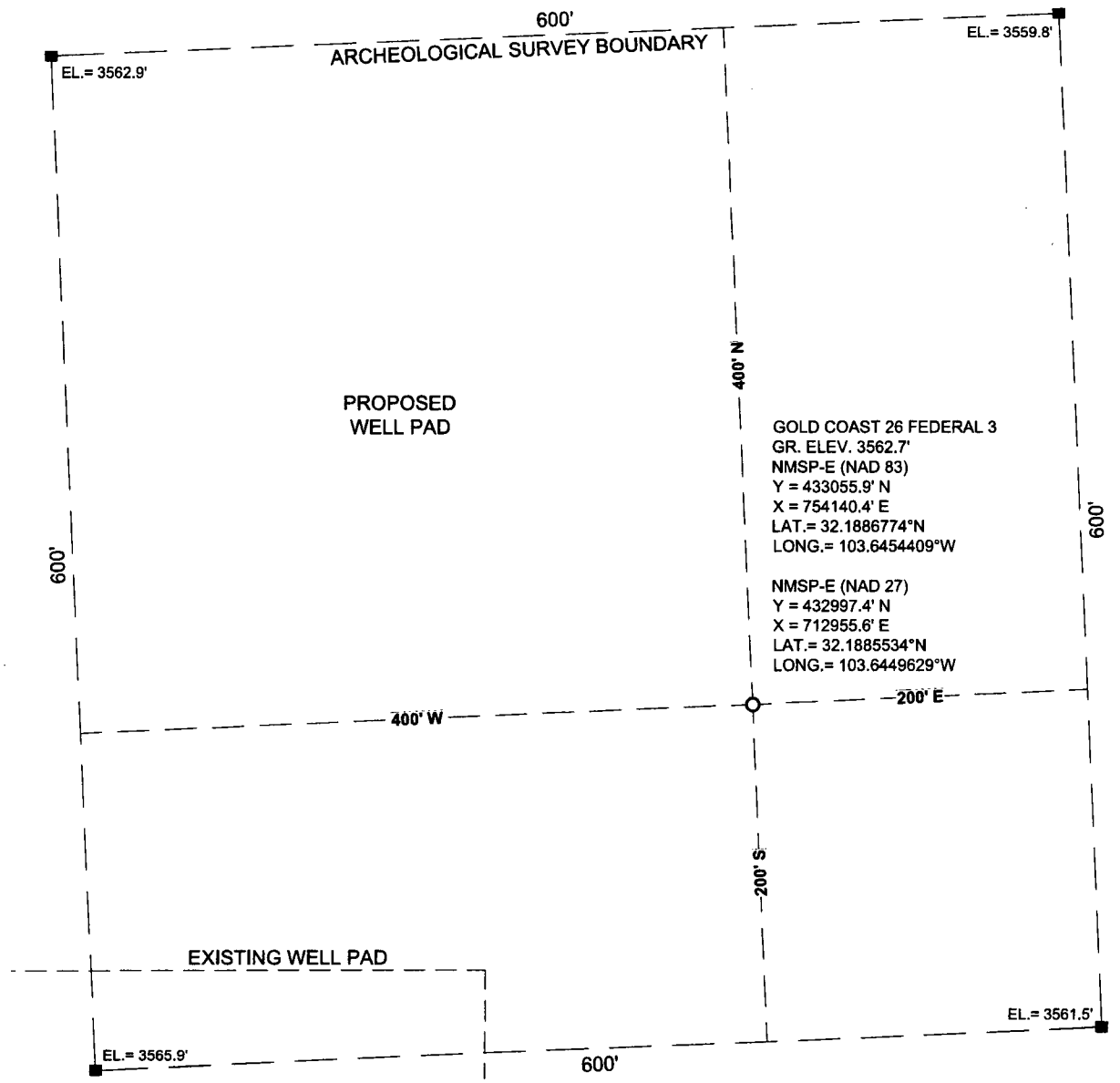
Ben Stone, Partner
SOS Consulting, LLC
P.O. Box 300
Como, TX 75431
903-488-9850

Sincerely,

Nevin Bannister
Chief Operating Officer

8214 Westchester Dr., Suite 850 • Dallas, TX 75225 • Phone: 214-292-2011 • Fax: 214-292-2021

SITE LOCATION



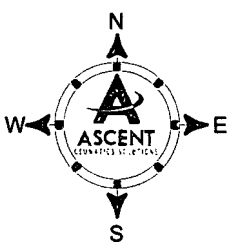
SECTION 26, T 24 S, R 32 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 2612' FNL & 2643' FWL

OPERATOR: OWL SWD OPERATING, L.L.C.

WELL NAME: GOLD COAST 26 FEDERAL 3



DRIVING DIRECTIONS:

From Jct. of County Road J-1 "Orla Hwy" and State Hwy 128 30 miles west of Jal. Go east on State Hwy 128 for 0.6 miles to a lease road right. Then go south on lease road for 1.6 miles and southeast 0.8 miles to a well pad & the location flag is to the north approximately 400 feet.

ASCENT GEOMATICS SOLUTIONS
COLLECT-ANALYZE-DELIVER
GEOSPATIAL DATA
4500 W. ILLINOIS STE:202
MIDLAND, TEXAS 79705
(432) 756-5680

OILFIELD WATER LOGISTICS

OWL SWD OPERATING, L.L.C.

JOB No.: B18.OWLL.0009

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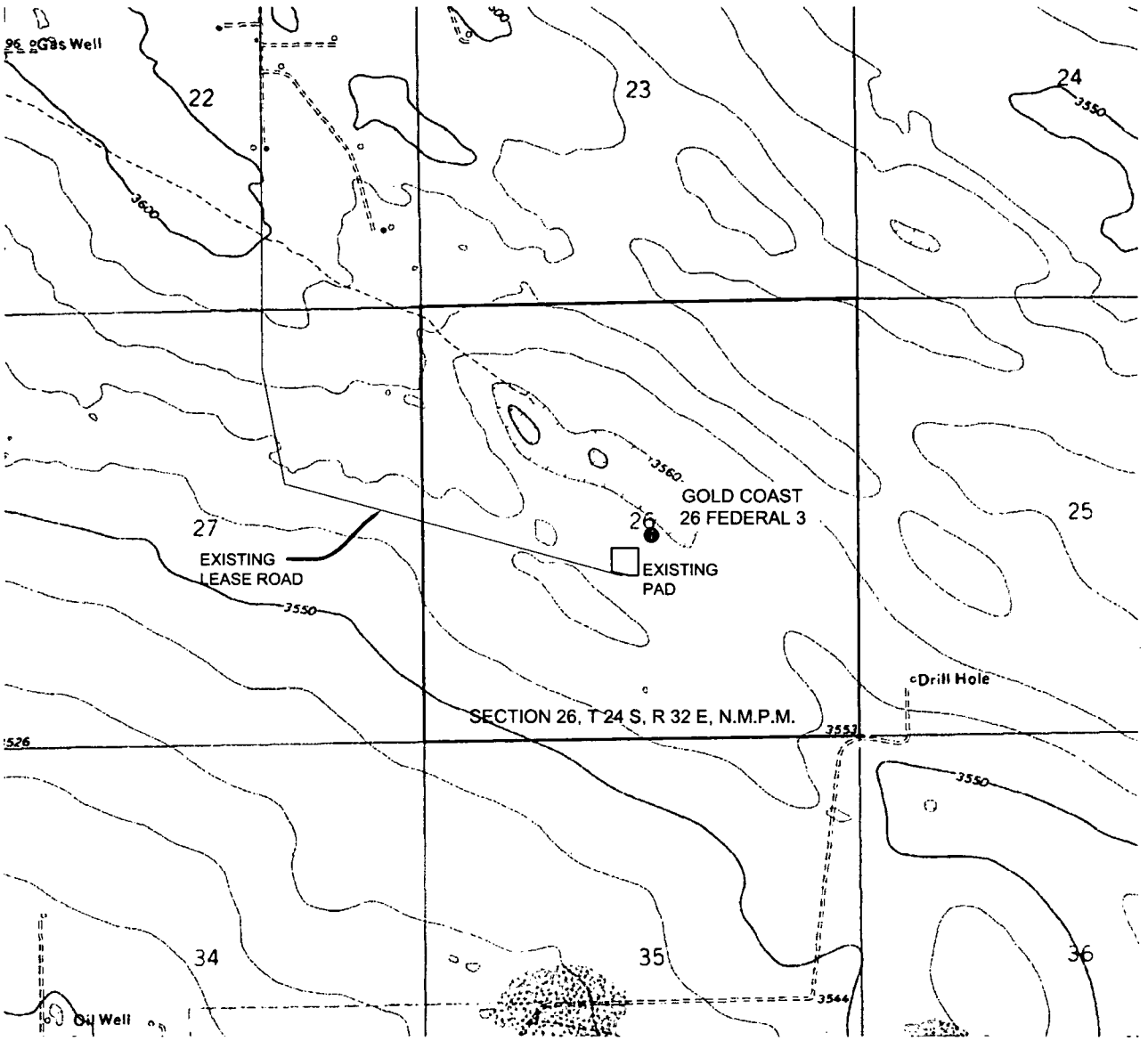
LOCATION VERIFICATION MAP



2000 0 2000 4000 FEET

SCALE: 1" = 2000'

SECTION 26, T 24 S, R 32 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 2612' FNL & 2643' FWL

OPERATOR: OWL SWD OPERATING, L.L.C.

WELL NAME: GOLD COAST 26 FEDERAL 3

N
W E
S

DRIVING DIRECTIONS:

From Jct. of County Road J-1 "Orla Hwy" and State Hwy 128 30 miles west of Jal. Go east on State Hwy 128 for 0.6 miles to a lease road right. Then go south on lease road for 1.6 miles and southeast 0.8 miles to a well pad & the location flag is to the north approximately 400 feet.

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COLLECT-ANALYZE-DELIVER
GEOSPATIAL DATA
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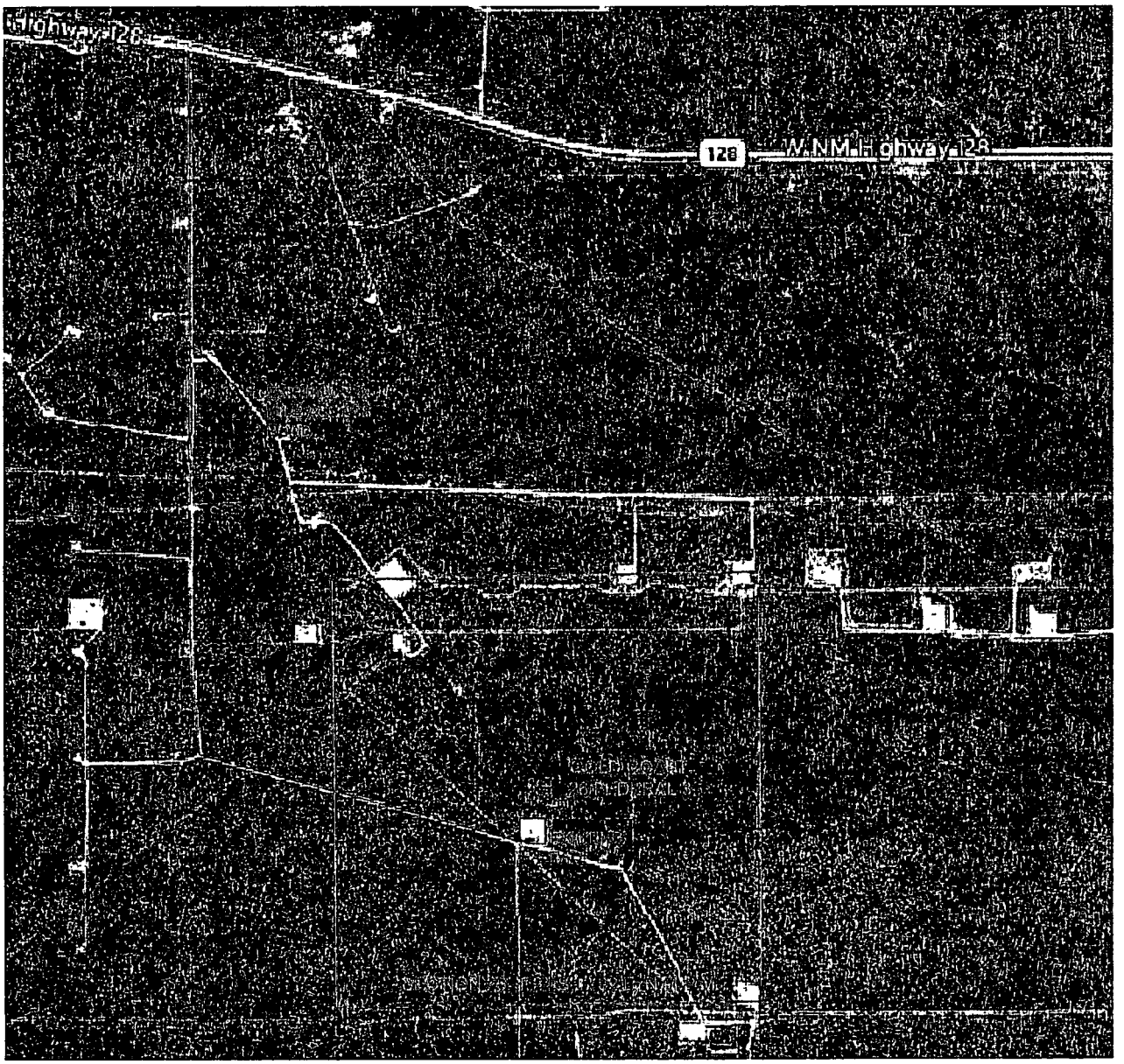
MIDLAND, TEXAS 79705
(432) 756-5680

OILFIELD WATER LOGISTICS

OWL SWD OPERATING, L.L.C.

JOB No.: B18.OWLL.0009

ACCESS MAP



2000 0 2000 4000 FEET

SCALE: 1" = 2000'

SECTION 26, T 24 S, R 32 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 2612' FNL & 2643' FWL

OPERATOR: OWL SWD OPERATING, L.L.C.

WELL NAME: GOLD COAST 26 FEDERAL 3

N W E S

ASCENT

DRIVING DIRECTIONS:

From Jct. of County Road J-1 "Orla Hwy" and State Hwy 128 30 miles west of Jal. Go east on State Hwy 128 for 0.6 miles to a lease road right. Then go south on lease road for 1.6 miles and southeast 0.8 miles to a well pad & the location flag is to the north approximately 400 feet.

OILFIELD WATER LOGISTICS

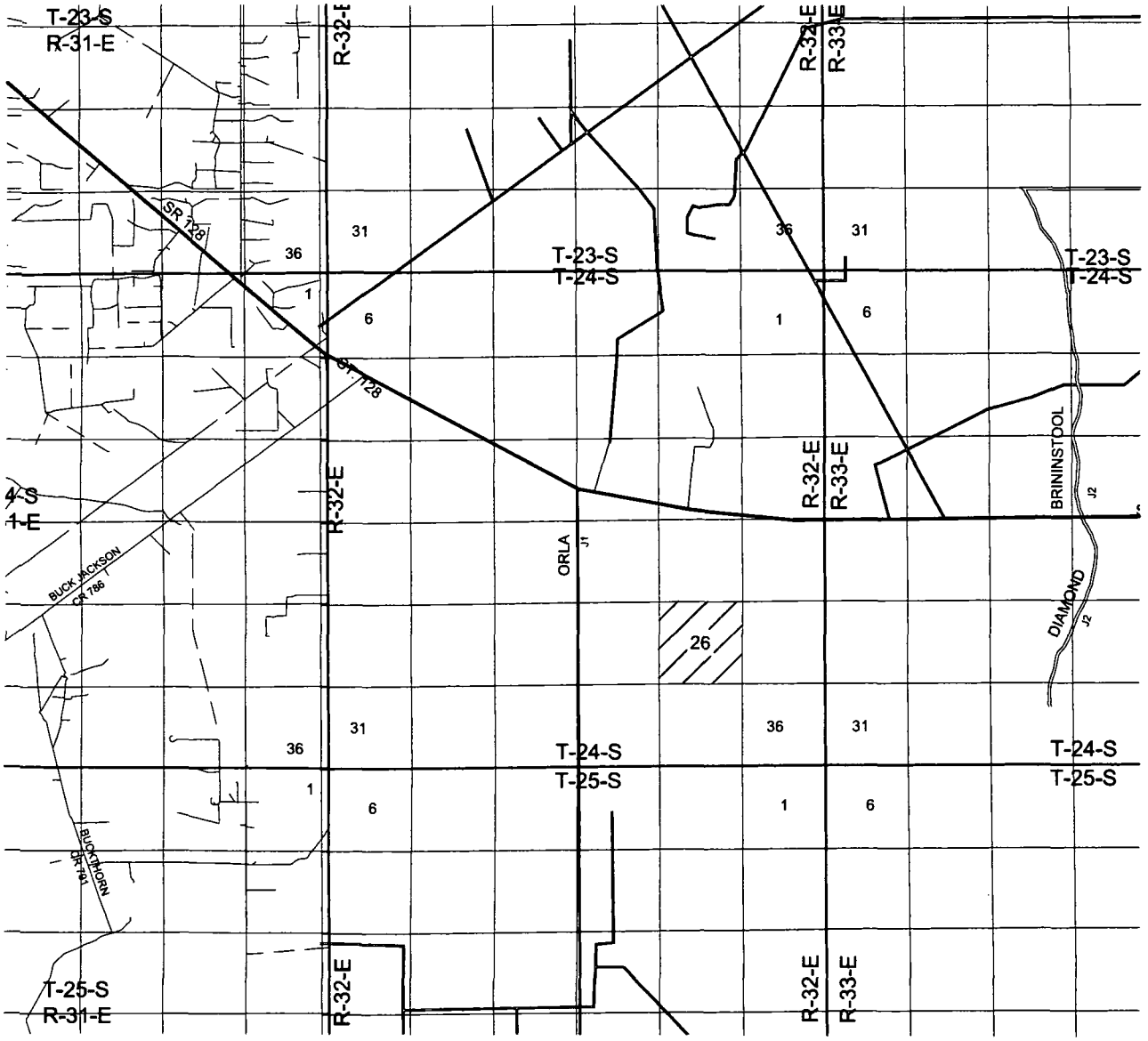
ASCENT GEOMATICS SOLUTIONS

ASCENT GEOMATICS SOLUTIONS
COLLECT-ANALYZE-DELIVER
GEOSPATIAL DATA
4500 W. ILLINOIS STE:202
MIDLAND, TEXAS 79705
(432) 756-5680

OWL SWD OPERATING, L.L.C.

JOB No.: B18.OWLL.0009

VICINITY MAP



2 0 2 MILES 4 MILES

SCALE: 1" = 2 MILES

SECTION 26, T 24 S, R 32 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 2612' FNL & 2643' FWL

OPERATOR: OWL SWD OPERATING, L.L.C.

WELL NAME: GOLD COAST 26 FEDERAL 3

N W E S ASCENT GEOMATICS SOLUTIONS

DRIVING DIRECTIONS:

From Jct. of County Road J-1 "Orla Hwy" and State Hwy 128 30 miles west of Jal. Go east on State Hwy 128 for 0.6 miles to a lease road right. Then go south on lease road for 1.6 miles and southeast 0.8 miles to a well pad & the location flag is to the north approximately 400 feet.

OILFIELD WATER LOGISTICS

ASCENT GEOMATICS SOLUTIONS

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4500 W. ILLINOIS STE:202
MIDLAND, TEXAS 79705
(432) 756-5680

OWL SWD OPERATING, L.L.C.

JOB No.: B18.OWLL.0009

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AFMSS

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

Drilling Plan Data Report

12/03/2018

APD ID: 10400024188 **Submission Date:** 02/23/2018

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Well Type: INJECTION - DISPOSAL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3566	25	25	GYPSUM	OTHER : Caliche, sand	No
2	SANTA ROSA	3361	205	205	SANDSTONE	USEABLE WATER	No
3	RUSTLER	2556	1010	1010	ANHYDRITE	OTHER : Produced water	No
4	TOP SALT	2224	1342	1342	SALT	OTHER : Salt	No
5	BASE OF SALT	-1114	4680	4680	SALT	NONE	No
6	RAMSEY	-1316	4882	4882	SANDSTONE,ANHYDRITE,SILTSTONE	NONE	No
7	BELL CANYON	-1359	4925	4925	LIMESTONE	OIL	No
8	CHERRY CANYON	-2267	5833	5833	LIMESTONE,SANDSTONE	OIL	No
9	BRUSHY CANYON	-3637	7203	7203	LIMESTONE,SANDSTONE	OIL	No
10	BONE SPRING	-5257	8823	8823	LIMESTONE,SHALE,SANDSTONE	OIL	No
11	WOLFCAMP	-10034	13600	13600	SHALE	OIL	No
12	STRAWN	-10634	14200	14200	LIMESTONE,SHALE,COAL	NATURAL GAS	No
13	MORROW	-11534	15100	15100	LIMESTONE,SANDSTONE	NATURAL GAS	No
14	WOODFORD	-13334	16900	16900	SHALE	NONE	No
15	DEVONIAN	-13484	17050	17050	LIMESTONE,DOLOMITE	OIL	Yes
16	ORDOVICIAN	-15434	19000	19000	LIMESTONE,CHERT	NONE	No

Section 2 - Blowout Prevention

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Pressure Rating (PSI): 5M **Rating Depth:** 10000

Equipment: Shaffer Spherical Annular or Equivalent 13-5/8" 10M Remote w/ Manual Valve Override Axon Type 50 13 5/8" 10,000#WP Ram 13 5/8" 10,000#WP Ram With required adapters Mud Cross 13 5/8" 10,000#WP Wing Valve 3 1/16" 10,000#WP HCR Valve 3 1/16" 10,000#WP Choke Blk 3 1/16" 10,000#WP DSA 5M to 10M Safety Factor 2,25 2-Kill Valves 3 1/16" 10,000#WP Check Valve 3 1/16" 10,000#WP Choke Line 3 1/16" 10M Armored Kill Line 3.0" 10,000#WP Armored

Requesting Variance? YES

[redacted]

Choke Diagram Attachment:

10M_CHOKE_BLM_GoldCoast_20180823091842.pdf

Flex_Hose_Variance_Report___Scandrill_Quest_Rig_20180823103536.pdf

BOP Diagram Attachment:

10M_BOP_BLM_GoldCoast_20180823091902.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	24	20.0	NEW	API	N	0	1090	0	1090	3566	2476	1090	K-55	106	BUTT	3	2.41	DRY	1.8	DRY	20.39
2	INTERMEDIATE	17.5	13.375	NEW	API	N	0	4300	0	4300	3566	-734	4300	K-55	68	BUTT	1.28	1.15	DRY	1.8	DRY	4.45
3	PRODUCTION	12.25	9.625	NEW	API	N	0	12200	0	12200	3566	-8634	12200	HCP-110	53.5	LTC	1.42	1.09	DRY	1.8	DRY	2.56
4	LINER	8.5	7.0	NEW	API	N	11900	17050	11900	17050	-8334	-13484	5150	Q-125	35	LTC	1.11	1.44	DRY	1.8	DRY	6.14

Casing Attachments

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CSG_DESIGN_GOLDCOAST_rvsd_20180822__20180823110402.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CSG_DESIGN_GOLDCOAST_rvsd_20180822__20180823110428.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CSG_DESIGN_GOLDCOAST_rvsd_20180822__20180823110442.pdf

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Casing Attachments

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CSG_DESIGN_GOLDCOAST_rvsd_20180822__20180823110455.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1090	1425	1.76	13.5	2508	150	CLS C	2% CaCl + 0.25 pps Celloflake
SURFACE	Tail		0	1090	475	1.34	14.8	636.5	100	CLS C	4% Gel + 5% Salt + 2% CaCl + 1/4 pps celloflake
INTERMEDIATE	Lead		0	4300	4850	1.94	12.7	9402.9	100	65:35 Poz C	6% Gel + 5% Salt + 1/4 pps celloflake
INTERMEDIATE	Tail		0	4300	390	1.33	14.8	517.7	100	CLS C	2% Gel
PRODUCTION	Lead	5700	0	5700	960	2.38	11.9	2284.6	50	50:50 Poz C	6% Gel + 10% Gel + 5% Salt + 1/4 pps celloflake
PRODUCTION	Tail		0	5700	40	1.26	14.2	47	50	50:50 Poz H	2% Gel
PRODUCTION	Lead	5700	5700	12200	1370	1.94	12.7	2642.6	35	65:35 Poz C	6% Gel + 5% Salt + 1/4 pps celloflake
PRODUCTION	Tail		5700	12200	90	1.29	14.2	114.6	25	Poz H	2% Gel
LINER	Lead		11900	17050	400	1.43	14.8	568.9	10	CLS H	2% Gel, 0.3% retarder, 0.7% FLA, 0.2% dispersant, 0.4 pps defoam, 0.1% Anti-settling
LINER	Tail		11900	17050	60	1.57	15.6	92.6	20	CLS H	3% Silica Sand + additives

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: SUFFICIENT MUD MATERIALS TO MAINTAIN MUD PROPERTIES AND MEET MINIMUM LOST CIRCULATION AND WEIGHT INCREASE REQUIREMENTS WILL BE KEPT ON LOCATION AT ALL TIMES.
Describe the mud monitoring system utilized: PVT/ PASON/ VISUAL MONITORING

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4900	12200	LSND/GEL	8.7	9			9.5				pH 9.5 - 10.5
0	1300	SPUD MUD	8.5	10.2			10				
1300	4900	OTHER : Brine	8.5	9.2			10				
12200	17050	OTHER : XCD Brine Mud	11	11			9.5				pH 9.5 - 10.5
17050	19000	WATER-BASED MUD	8.4	8.6			9.5				

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

a. Mud logging through the interval will ensure the target interval remains Devonian and Silurian.
b. CBL (Radial, CET or equivalent) on both intermediate casing strings.
c. Standard porosity log suite from TD to approximately 14,000'.
d. No corings or drill tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

List of open and cased hole logs run in the well:

CALIPER,CBL,CNL,MUDLOG

Coring operation description for the well:

Coring is not planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 9000 **Anticipated Surface Pressure:** 4820

Anticipated Bottom Hole Temperature(F): 220

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Contingency_Plan_Complete_3_Part_20140826_20180219125813.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Other proposed operations facets description:

11. Waste Management - All drill cuttings and other wastes associated with and drilling operations will be transported to the Lea County Sundance facility (or alternate), permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

12. Anticipated Start Date - Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take six to seven weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, and subject to the availability of the drilling contractor, the anticipated start date is:
May 1, 2018.

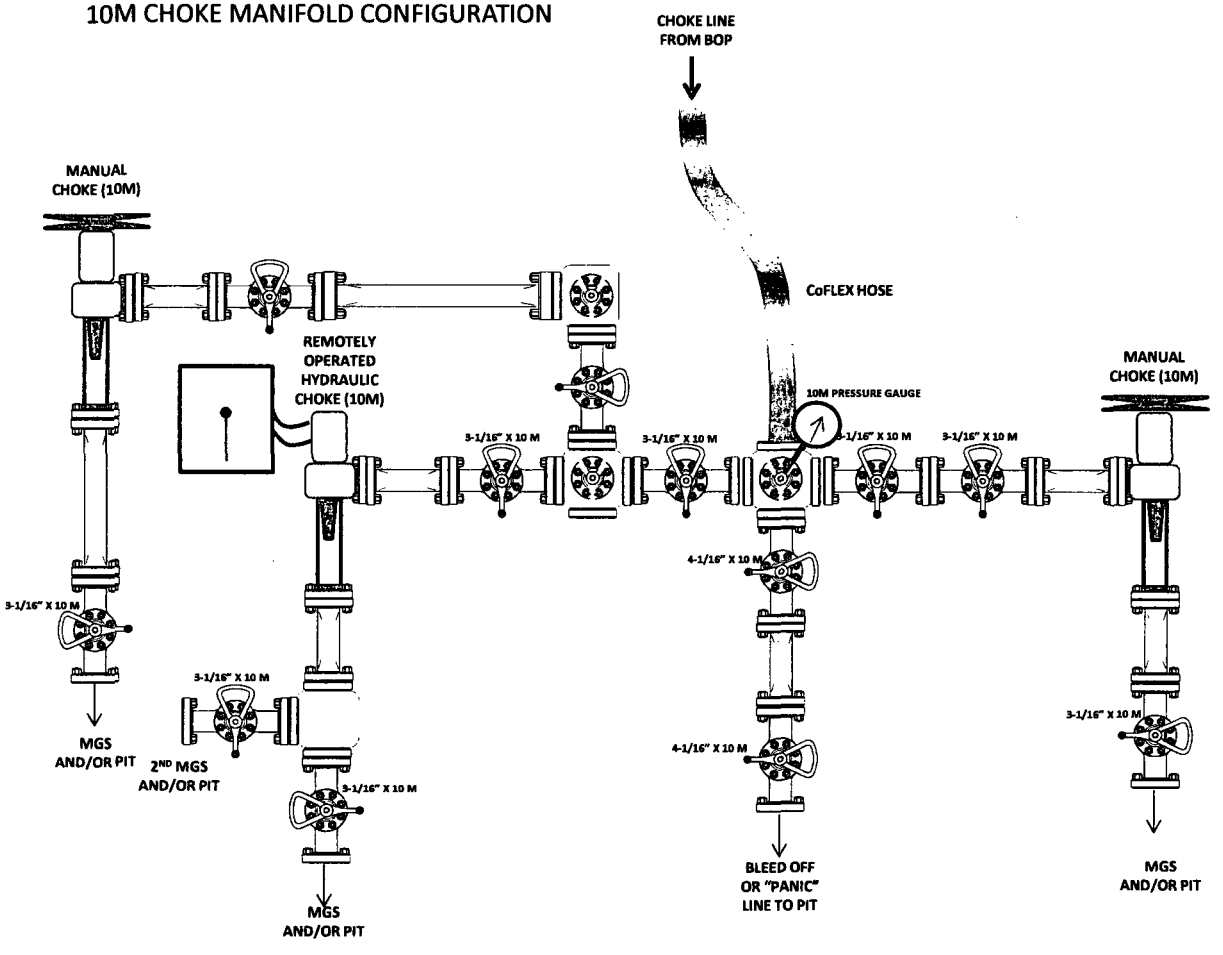
13. Configure for Salt Water Disposal – Subsequent to SWD permit approval from OCD and prior to

commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per BLM and OCD test procedures. (Notify BLM/ NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily maximum volume is 25,000 bpd and average of 15,000 bpd at a maximum surface injection pressure of 3410 psi (0.2 psi/ft to uppermost injection interval, i.e., casing shoe). If satisfactory disposals rates cannot be achieved at default pressure of .2 psi/ft, Owl SWD Operating, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psi below parting pressure.

Other proposed operations facets attachment:

Other Variance attachment:

10M CHOKE MANIFOLD CONFIGURATION



Continental

ContiTech

QUALITY CONTROL	No.: QC-DB- 351 / 2016
	Page : 1 / 88
Hose No.: 72879	Revision : 0
	Date: 05. September 2016.
	Prepared by :
	Appr. by:

CHOKE AND KILL HOSE

id.: 3" 69 MPa x 13,72 m (45 ft)

DATA BOOK

Purchaser: SCANDRILL

Purchaser Order No.: 143799

ContiTech Rubber Order No.: 543951

ContiTech Oil & Marine Corp. Order No.: 4500795683 COM880841

NOT DESIGNED FOR WELL TESTING

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	1050	
PURCHASER:	ContiTech Oil & Marine Corp.			P.O. N°:	4500795683	
CONTITECH RUBBER order N°:	543951	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	72879	NOMINAL / ACTUAL LENGTH:		13,72 m / 13,80 m		
W.P. 69,0 MPa	10000 psi	T.P. 103,5 MPa	15000 psi	Duration:	60	min.

Pressure test with water at ambient temperature

See attachment (1 page)

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	2587	AISI 4130	J5251
3 1/16" 10K API Swivel Flange end		AISI 4130	036809
Hub		AISI 4130	J6433
3" coupling with	2584	AISI 4130	J5251
3 1/16" 10K API b.w. Flange end		AISI 4130	62580

Not Designed For Well Testing

API Spec 16 C 2nd Edition– FSL2

Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

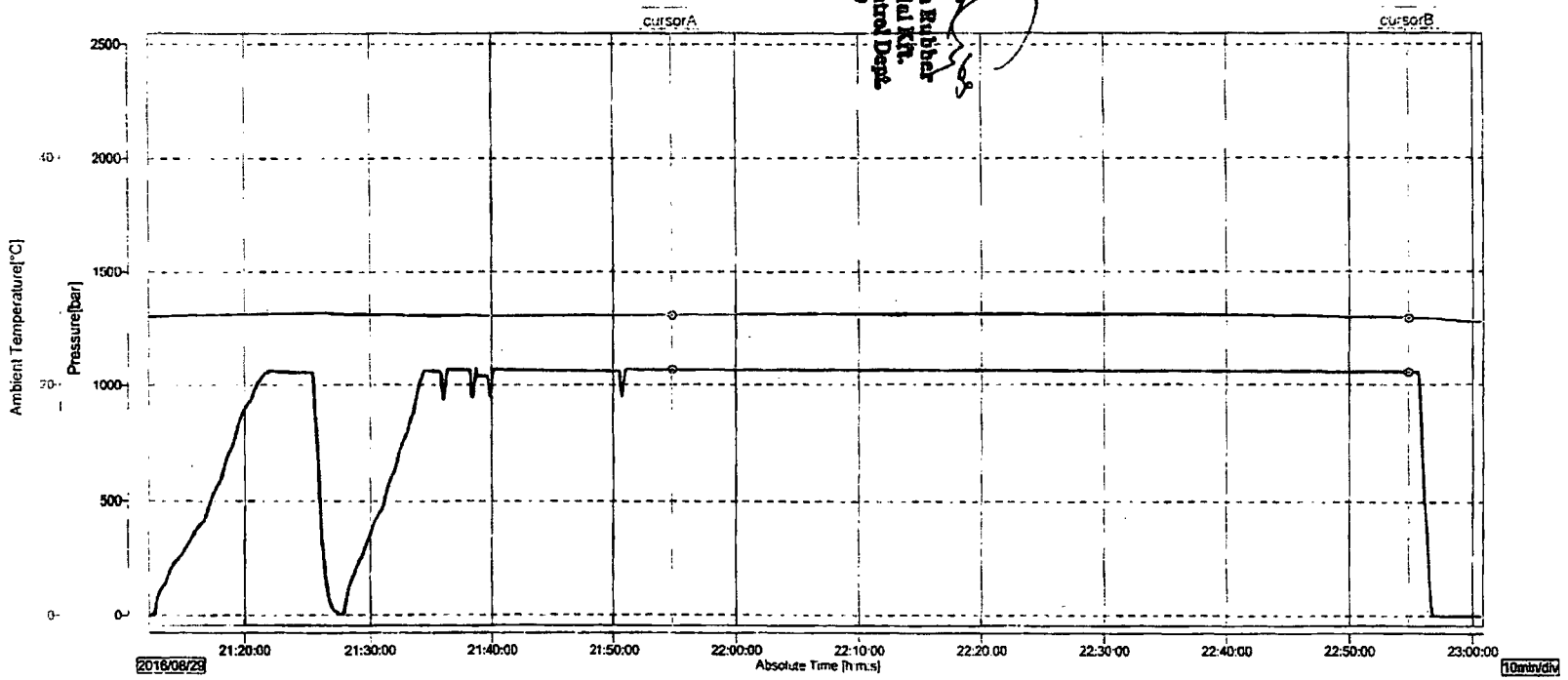
Date:	Inspector	Quality Control
30. August 2016.		ContiTech Rubber Industrial Kft. Quality Control Dept.

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 1050

File Name	: 014986_72879.GEV,...,014996_72879.GEV
File Message	: 72879
Device Type	: GX10
Serial No.	: S5P606399
Data Count	: 1302
Sampling Int.	: 5.000 sec
Start Time	: 2016/08/29 21:12:25.000
Stop Time	: 2016/08/29 23:00:50.000
Print Group	: Press-Temp
Print Range	: 2016/08/29 21:12:25.000 - 2016/08/29 23:00:50.000
Comment	: 142056635

	Cursor A	Cursor B	Difference
Data No.	509	1229	720
Absolute Time	2016/08/29 21:54:50.000	2016/08/29 22:54:50.000	01:00:00.000
Tag Comment	Value A	Value B	Value B-A
Pressure[bar]	1068.16	1054.43	-13.73
Ambient Temperature[°C]	26.17	25.88	-0.29

ContiTech Rubber Industrial Kft. Quality Control Dept.



CONTITECH RUBBER Industrial Kft.

No: QC-DB- 351 / 2016

Page: 6 / 88

Hose Data Sheet

CRI Order No.	543951
Customer	ContiTech Oil & Marine Corp.
Customer Order No	4500795683 COM880841
Item No.	1
Hose Type	Flexible Hose
Standard	**API SPEC 16C 2ND EDITION FSL2**
Inside dia in inches	3
Length	45 ft
Type of coupling one end	FLANGE 3.1/16" 10K API SPEC 6A TYPE 6BX, BUTT WELDED, BX154ST.ST. LINED R.GR. SOUR
Type of coupling other end	FLANGE 3.1/16" 10K API SPEC 17D SV SWIVEL FLANGE, BX154 ST.ST. LINED R.GR. SOUR
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	CONTINENTAL CONTITECH
Cover	NOT FIRE RESISTANT
Outside protection	St.steel outer wrap
Internal stripwound tube	No
Lining	OIL + GAS RESISTANT SOUR
Safety clamp	Yes
Lifting collar	Yes
Element C	Yes
Safety chain	Yes
Safety wire rope	No
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
Min. Bend Radius operating [m]	0,90
Min. Bend Radius storage [m]	0,90
Electrical continuity	The Hose is electrically continuous
Type of packing	WOODEN CRATE ISPM-15

ContiTech Rubber
Industrial Kft.
QC 2

Continental

ContiTech Fluid Technology

ContiTech Oil & Marine Corp. # 11535 Brittmoore Park Dr., Houston, TX 77041-6916 USA

ScanDrill Inc.
9395 HWY 2767
TYLER TX 75708

Delivery Note

Document No.	**83352143**
Document Date	**10/05/2016**
Customer Number	15483
Customer VAT No.	
Supplier Number	
N° EORI:	FR41027953300021
Purchase Order No.	143799
Purchase Order Date	07/01/2016
Sales Order Number	880841
Sales Order Date	07/05/2016
Unloading Point	

Page 1 of 3

Transport-Details - Shipping

Conditions

Shipping Conditions	0 days
Inco Terms	EXW Houston, TX Ex Works

Weights (Gross / Net)

Total Weight	2,323 LB
Net Weight	1,643 LB

Buyer: Joe Ward
E-mail: jward@scandrill.com
Tel: 903.597.5368

Payment Terms:
50% Due at order Placement
50% Due Prior to Dispatch

Rev 01 - 092116 - Sales Tax added to the order.

Item	Material/Description	Quantity	Weight
10	HCK3FA45IPSIVS 3" x 45ft, Choke and Kill Hose, WP 10K End A: 3.1/16" 10K Flange, API Spec. 6A Type 6BX, Butt Welded, BX154 Stainless Steel 316 Lined Ring Groove - Sour End B: 3.1/16" 10K Flange, API Spec 17D SV Swivel Flange, BX154 Stainless Steel 316 Lined Ring Groove - Sour Standard: API SPEC 16C 2ND EDITION FSL2 - Monogrammed Working Pressure: 10000 psi Test Pressure: 15000 psi Fire Rated: No Armoured: Yes - Stainless Steel 316L Interlock Design Temperature: -20 to 100°C High Temperature Exposure / Survival @ 177 Deg C (internal in a kick situation) As Per API 16C B.12.5!	1 PC	1,643 LB

Continental

ContiTech Fluid Technology

Conditions		**Delivery Note**	
Shipping Conditions	0 days	Document No.	83352143
Inco Terms	EXW Houston, TX Ex Works	Document Date	10/05/2016

Brand Name: Continental ContiTech

serial no:72879

Supplied with:
2 x Safety Clamps
2 x Lifting Collars Double Eyed
2 x Safety Chains c/w Shackles Each End x 8ft

Packing to ISPM-15 Heat Treated
Packing type: Wooden Crate.
Gross weight: 1056 kg / 2323 lbs
Dimensions: 2870 x 640 x 2800 mm (L x W x H)
113 x 25.2 x 110.2 inch
To be handled/shipped in a vertical position

HTS# 4009.42.0050
ECCN: EAR99
COO: Hungary

20	00TAX-SALES	1	PC	0	LB
	SALES TAX %8.25				

Buyer: Joe Ward
E-mail: jward@scandrill.com
Tel: 903.597.5368

Payment Terms:
50% Due at order Placement
50% Due Prior to Dispatch

Rev 01 - 092116 - Sales Tax added to the order.

Order/Item 880841/20 07/05/2016
Customer's PO no./item 143799

Inner packages

Continental

ContiTech Fluid Technology

Conditions		**Delivery Note**	
Shipping Conditions	0 days	Document No.	83352143
Inco Terms	EXW Houston, TX Ex Works	Document Date	10/05/2016
		Page 3 of 3	

Quantity	Packaging	Material	Charge
1	113 X 25.2 X 110.2 INCH -Wooden crate	HCK3FA45IPSIVS	1

Package number 118448718

(1) Ship-to party
ScanDrill Inc.
9395 HWY 2767
TYLER TX 75708

(2) Unloading point - storage location - usage

(3) Delivery note no.
83352143

(4) Vendor address (short name, plant, ZIP, city)
ContiTech Oil & Marine Corp.
11535 Brittmoore Park Drive
Houston TX 77041-6916

(8) Supplier ref. no.

(9) Quantity
SN: 72879

(5) Net weight
1,643 LB

(6) Gross weight
2,323 LB

(7) Number of packages
1

(10) Description of delivery, service

(12) ContiTech Sales order no.

(13) Packing date
10/07/16

(14) Engineering change status

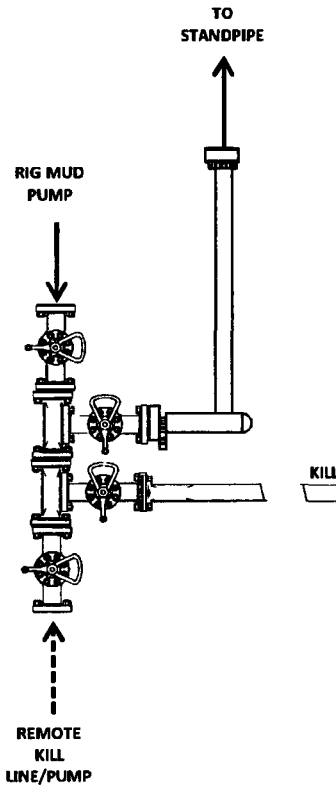
(15) Package no.
118448718

(16) Customer PO no.
143799

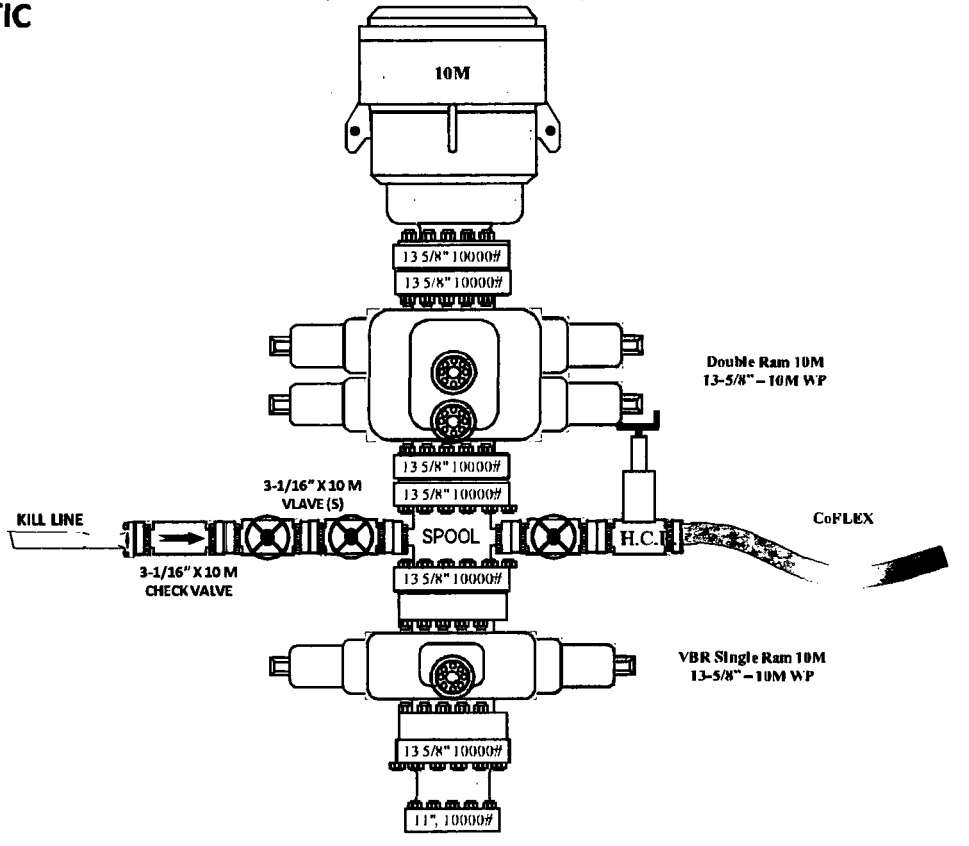
Material label VDA 4902 Vers. 4

10M BOP Stack

10M REMOTE KILL SCHEMATIC



10M BOP Stack
(10M Annular)



HYDROGEN SULFIDE CONTINGENCY PLAN

POLICY OF

OWL SWD OPERATING, LLC

FOR OPERATIONS IN SOUTHEAST NEW MEXICO

MUST BE REVIEWED BY ALL PERSONNEL PRIOR TO COMMENCEMENT OF OPERATIONS

PREFACE / OVERVIEW

PLAN ACTIVATION

AT A MINIMUM, THE PLAN MUST BE ACTIVATED WHENEVER A RELEASE MAY CREATE A CONCENTRATION OF H2S OF MORE THAN 100 PPM IN ANY PUBLIC AREA, 500 PPM AT ANY PUBLIC ROAD OR 100 PPM 3,000 FEET FROM THE SITE OF RELEASE.

OPERATIONAL DISTINCTION OF CONDITION

FOR ALL OPERATIONS, OWL SWD OPERATING, LLC WILL APPLY THESE CRITERIA TO DETERMINE THE OPERATIONAL CONDITION:

A. **NORMAL / LOW CONDITIONS:** KNOWN H2S ***IS AT OR LESS THAN 10 PPM.***

PURSUANT TO NMOCD RULES AND REGULATIONS, OWL SWD OPERATING, LLC MAY PETITION THE NEW MEXICO OIL CONSERVATION DIVISION DIRECTOR FOR AN ***EXEMPTION*** TO ANY REQUIREMENT OF THIS SECTION.

FOR NORMAL / LOW CONDITION OPERATIONS, OTHER THAN AN AWARNESS OF THIS PLAN AND BASIC MONITORING AND WIND DIRECTION INDICATORS, AN EXEMPTION WILL BE REQUESTED AND DETAILED INFORMATION NOT OTHERWISE PROVIDED FOR IN THE NORMAL REGULATORY PERMITTING PROCESS MAY BE OMITTED.

B. **HIGH RISK CONDITIONS:** KNOWN H2S ***MAY APPROACH OR BE MORE THAN 100 PPM.***

IMPLEMENTATION

THIS PLAN DETAILS PROCEDURES AND ACTIVITIES PARTICULARY GEARED TOWARDS HIGH RISK OPERATIONAL CONDITIONS .

ADDITIONAL INFORMATION SHALL BE FURHISHED IN THE FORM OF SITE SPECIFICS AND MAPS WHEN THE OPERATIONAL CONDITION IS DERTIMINED TO BE HIGH RISK.

PREFACE / OVERVIEW (continued)

A. NOTIFICATION / COORDIATION OF EMERGENCY SERVICES

PRIOR TO COMMENCING ACTIVITIES AT A HIGH RISK SITE, THE APPROPIRATE EMERGENCY PERSONNEL FOR THE AREA WILL BE ALERTED TO THE ACTIVITY INCLUDING DATES, ANTICIPATED WORK TIMES, A COPY OF THIS PLAN AND THE FOLLOWING ITEMS SUCH THAT EMERGENCY PERSONNEL IS FULLY APPRISED OF THE OPERATION AND POTENTIAL OCURRANCES NO MATTER HOW UNLIKELY. *(REFER TO EMERGENCY TELEPHONE LIST IN SECTION 5 OF THE PLAN, PAGES 8-9.)*

B. SITE SPECIFICS SHALL INCLUDE:

WELL OR FACILTIY NAME, LOCATION (INCLUDING GIS COORDINATES) TYPE, DEPTH, ANTICIPATED OR MEASURED H2S CONCENTRATION, WELL OR LINE PRESSURES, PRESSURE AND FLOW CONTROL EQUIPMENT AND A SCHEMATIC DIAGRAM.

C. MAPS SHALL INDICATE:

1. LOCATION OF WELL OF FACILITY WITH LOCATION IN RELATION TO ROADS, PUBLIC AREAS AND TOWNS AS APPLICABLE.

2. DIRECTION AND SPEED OF PREVAILING WINDS AT THE SITE, AS CURRENT AS POSSIBLE.

3. INGRESS / EGRESS TO THE SITE AS WELL AS TYPICAL ACCESS ROUTES FROM THE NEAREST TOWN WITH EMERGENCY SERVICES.

4. POTENTIAL ROAD CLOSURE AREAS SHALL BE COORDINATED WITH EMERGENCY PERSONNEL AND MAPPED BASED ON CRITERIA ABOVE.

PLAN DEVELOPMENT

THIS PLAN HAS BEEN DEVELOPED IN ACCORDANCE WITH TITLE 19 NATURAL RESOURCES AND WILDLIFE CHAPTER 15 OIL AND GAS PART 11 HYDROGEN SULFIDE GAS AND ALL PARTS CONTAINED THEREIN.

IT FURTHER MEETS AS APPLICABLE, OSHA REQUIREMENTS AND API H2S PUBLICATIONS:

- 'RECOMMENDED PRACTICE FOR OIL AND GAS WELL SERVICING AND WORKOVER OPERATIONS INVOLVING HYDROGEN SULFIDE', RP-68 (API);
- 'RECOMMENDED PRACTICES FOR DRILLING AND WELL SERVICING OPERATIONS INVOLVING WELLS CONTAINING HYDROGEN SULFIDE', RP-49 (API);
- 'H2S AT CRUDE OIL PUMP STATIONS, PRODUCING WELLS, TANK BATTERIES AND ASSOCIATED PRODUCTION FACILITIES, PIPELINES, REFINERIES, GAS PLANTS AND COMPRESSOR STATIONS', RP-55 (API)

HYDROGEN SULFIDE CONTINGENCY PLAN

POLICY OF

OWL SWD OPERATING, LLC

FOR OPERATIONS IN SOUTHEAST NEW MEXICO

MUST BE REVIEWED BY ALL PERSONNEL PRIOR TO COMMENCEMENT OF OPERATIONS

SCOPE

THIS CONTINGENCY PLAN ESTABLISHES GUIDELINES FOR ALL COMPANY AND CONTRACTOR PERSONNEL WHO'S WORK ACTIVITIES MAY INVOLVE EXPOSURE TO HYDROGEN SULFIDE (H2S) GAS. GUIDELINES ADDRESSING PUBLIC SAFETY ARE INCLUDED.

OBJECTIVE

1. PREVENT ANY AND ALL ACCIDENTS, AND PREVENT THE UNCONTROLLED RELEASE OF HYDROGEN SULFIDE INTO THE ATMOSPHERE.

2. PROVIDE PROPER PROCEDURES TO HANDLE EMERGENCIES AND POSSIBLE EVACUATION.

3. PROVIDE IMMEDIATE AND ADEQUATE MEDICAL ATTENTION SHOULD AN INJURY OCCUR.

IMPLEMENTATION

THIS PLAN WITH ALL DETAILS IS TO BE FULLY IMPLEMENTED BEFORE OPERATIONS COMMENCE PURSUANT TO THE CONDITION BEING:

NORMAL / LOW CONDITIONS: KNOWN H2S ***IS AT OR LESS THAN 10 PPM.***

HIGH RISK CONDITIONS: KNOWN H2S ***MAY APPROACH OR BE MORE THAN 100 PPM.***

OVERVIEW OF PLAN

3. EMERGENCY RESPONSE PROCEDURES **(PAGES 4-6)**	THIS SECTION OUTLINES THE CONDITIONS PROCEDURE AND DENOTES STEPS TO BE TAKEN IN THE EVENT OF AN EMERGENCY OR HIGH RISK LEVELS OF H2S ARE IMMINENT.
4. HIGH RISK / EMERGENCY EQUIPMENT **(PAGES 6-7)**	THIS SECTION OUTLINES THE USE OF EMERGENCY EQUIPMENT THAT WILL BE REQUIRED FOR THE DRILLING OR WORKOVER OF THIS WELL.
5. EMERGENCY TELEPHONE NUMBERS **(PAGES 8-9)**	ALL PARTIES TO BE CONTACTED SHOULD AN EMERGENCY EXIST.
6. SAFETY BRIEFING **(PAGE 9)**	THIS SECTION DEALS WITH THE BRIEFING OF ALL PEOPLE INVOLVED IN THE DRILLING OPERATION.
7. EVACUATION / PUBLIC SAFETY **(PAGES 9-10)**	THIS SECTION DEALS WITH THE EVACUATION OF PERSONNEL AND PUBLIC SAFETY IN THE EVENT OF AN EMERGENCY.

APPENDICES

A. TRAINING REQUIREMENTS AND FIRST AIDE **(PAGE 11-12)**	ALL COMPANIES WILL INSURE THAT ALL PERSONNEL AT THE WELL SITE WILL HAVE HAD ADEQUATE TRAINING IN H2S SAFETY PROCEDURES. FIRST AIDE FOR H2S.
B. CHECK LISTS **(PAGES 13-14)**	A STATUS CHECK LIST AND A PROCEDURAL CHECK LIST HAVE BEEN INCLUDED TO INSURE ADHERENCE TO THE PLAN.
C. EFFECTS, LEVELS, RADIUS OF EXPOSURE, THRESHOLDS **(PAGES 15-18)**	A GENERAL INFORMATION SECTION HAS BEEN INCLUDED TO SUPPLY SUPPORT INFORMATION INCLUDING EFFECTS OF H2S, LEVELS AND RADIUS OF EXPOSURE & REGULATORY THRESHOLDS.

1. PERSONNEL RESPONSIBILITY

COMPANY FOREMAN / DESIGNATED PERSONNEL	SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THIS PLAN.
	SHALL BE IN COMPLETE COMMAND DURING ANY EMERGENCY.
	SHALL DESIGNATE A BACK-UP.

ALL PERSONNEL	1. ON ALARM, DON ESCAPE UNIT AND REPORT IN UP WIND BRIEFING AREA. 2. CHECK STATUS OF PERSONNEL (BUDDY SYSTEM). 3. SECURE BREATHING EQUIPMENT. 4. AWAIT ORDERS FROM SUPERVISOR.
DRILLING FOREMAN / RIG OPERATOR	1. REPORT TO UP WIND BRIEFING AREA. 2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH TOOL PUSHER OR DRILLER (BUDDY SYSTEM). 3. DETERMINE H2S CONCENTRATIONS. 4. ASSESS SITUATION AND TAKE CONTROL MEASURES.
TOOL PUSHER	1. REPORT TO UP WIND SAFETY BRIEFING AREA. 2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH DRILLING FOREMAN OR DRILLER (BUDDY SYSTEM). 3. DETERMINE H2S CONCENTRATION. 4. ASSESS SITUATION AND TAKE CONTROL MEASURES.
DRILLER	1. DON ESCAPE UNIT. 2. CHECK MONITOR FOR POINT OF RELEASE. 3. REPORT TO BRIEFING AREA. 4. CHECK STATUS OF PERSONNEL (IN AN ATTEMPT TO RESCUE, USE THE BUDDY SYSTEM). 5. ASSIGNS LEAST ESSENTIAL PERSON TO NOTIFY DRILLING FOREMAN AND TOOL PUSHER BY QUICKEST MEANS IN CASE OF THEIR ABSENCE. 6. ASSUMES THE RESPONSIBILITIES OF THE DRILLING FORMAN AND TOOL PUSHER UNTIL THEY ARRIVE SHOULD THEY BE ABSENT.
DERRICK MAN FLOOR MAN #1 FLOOR MAN #2 VISITORS	WILL REMAIN IN SAFETY BRIEFING AREA UNTIL INSTRUCTED BY SUPERVISOR.
MUD ENGINEER	1. REPORT TO BRIEFING AREA. 2. WHEN INSTRUCTED, BEGIN CHECK OF MUD FOR PH AND H2S LEVEL.
SAFETY PERSONNEL	1. MASK UP AND CHECK STATUS OF ALL PERSONNEL AND SECURE OPERATIONS AS INSTRUCTED BY DRILLING FOREMAN AND REPORT TO BRIEFING AREA.

2. NORMAL / LOW H2S CONDITION

CONDITIONS ARE CONSIDERED NORMAL WHEN THERE ARE REASONABLE EXPECTATIONS THAT NONE OR LOW CONCENTRATIONS OF H2S WILL BE ENCOUNTERED DURING ALL PHASES OF THE CURRENT OPERATIONS. (SEE APPENDIX 'C', THRESHOLDS, PRGPH.3)

1. LOW H2S - LEVELS ARE KNOWN TO CONSISTENTLY BE AT OR **BELOW 10 PPM**.

2. NORMAL CONDIDTION EXPECTATIONS ARE BASED ON HISTORICAL EVIDENCE OF THE AREA, GEOLOGIC FORMATIONS AND TYPE OF OPERATIONS WITH REGARD TO FLUIDS BEING UTILIZED FOR DRILLIING AND/OR WORKOVER TASKS.

3. OPERATING IN A NORMAL CONDITION DOES NOT RELIEVE ANY PERSONNEL OF THEIR RESPONSIBILITY, NOR SHOULD IT LESSEN THEIR ATTENTION TO KNOWING THE SAFETY PROCEDURES THAT WILL IMMEDIATELY BE IMPLEMENTED UPON ANY EVIDENCE OF CHANGING H2S LEVELS.

4. ALL PERSONNEL WORKING ON SITE WILL DON PERSONAL H2S DETECTORS.

5. A WINDSOCK OR OTHER WIND DIRECTION INDICATOR WILL BE ON LOCATION AND EASILY VISIBLE FROM ALL AREAS.

6. ALL PERSONNEL WILL HAVE A CURRENT H2S TRAINING CARD.

7. ALL PERSONNEL WILL HAVE VIEWED THIS H2S CONTINGENCY PLAN.

3. EMERGENCY RESPONSE PROCEDURES

NOTICE: FOR ALL SITES AND OPERATIONS WHERE REASONABLE EXPECTATIONS ARE THAT H2S LEVELS MAY BE **ABOVE 100 PPM**, ALL SERVICE COMPANY PERSONNEL HAVE READ THIS H2S CONTINGENCY PLAN AND WILL VERBALLY INDICATE STRICT ADHERENCE TO WITH ALL PROCEDURES ESPECIALLY WITH REGARD TO THEIR JOB TITLE AND DUTIES ON THIS LOCATION.

IMMEDIATE PROCEDURES

A. IN THE EVENT OF ANY EVIDENCE OF H2S LEVEL **ABOVE 100 PPM**, (OR IS APPROACHING 100 PPM) TAKE THE FOLLOWING STEPS:

1. SECURE BREATHING EQUIPMENT.

2. ORDER NON-ESSENTIAL PERSONNEL OUT OF DANGER ZONE.

3. TAKE STEPS TO DETERMINE IF THE H2S LEVEL CAN BE CORRECTED OR SUPPRESSED AND, IF SO, PROCEED IN NORMAL OPERATION.

B. IF UNCONTROLLABLE CONDITIONS OCCUR:

1. TAKE STEPS TO PROTECT AND/OR REMOVE ANY PUBLIC IN THE DOWN-WIND AREA FROM THE RIG - PARTIAL EVACUATION AND ISOLATION. NOTIFY NECESSARY PUBLIC SAFETY PERSONNEL AND THE BUREAU OF LAND MANAGEMENT OF THE SITUATION.

2. REMOVE ALL PERSONNEL TO SAFE BREATHING AREA.

3. NOTIFY PUBLIC SAFETY PERSONNEL TO SAFE BREATHING AREA.

4. PROCEED WITH BEST PLAN (AT THE TIME) TO REGAIN CONTROL OF THE WELL. MAINTAIN TIGHT SECURITY AND SAFETY PROCEDURES.

EMERGENCY ACTIONS

WELL BLOWOUT - IF EMERGENCY

1. EVACUATE ALL PERSONNEL IF POSSIBLE.

2. IF SOUR GAS - EVACUATE RIG PERSONNEL.

3. IF SOUR GAS - EVACUATE PUBLIC WITHIN 3000 FT RADIUS OF EXPOSURE.

4. DON SCBA AND RESCUE.

5. CALL 911 FOR EMERGENCY HELP (FIRE DEPT AND AMBULANCE) AND NOTIFY COMPANY FOREMAN / DESIGNATED PERSONNEL.

6. GIVE FIRST AID.

PERSON DOWN LOCATION / FACILITY

1. IF IMMEDIATELY POSSIBLE, CONTACT 911. GIVE LOCATION AND WAIT FOR CONFIRMATION.

2. DON SCBA AND RESCUE.

AS APPLICABLE FOR TODAY'S CURRENT OPERATIONS / EVENTS

TAKING A KICK

WHEN TAKING A KICK DURING AN H2S EMERGENCY, ALL PERSONNEL WILL FOLLOW STANDARD BOP PROCEDURES AFTER REPORTING TO BRIEFING AREA AND MASKING UP.

OPEN-HOLE LOGGING

ALL UNNECESSARY PERSONNEL OFF FLOOR. DRILLING FOREMAN AND SAFETY PERSONNEL SHOULD MONITOR CONDITION, ADVISE STATUS AND DETERMINE NEED FOR USE OF AID EQUIPMENT.

RUNNING CASING OR PLUGGING

FOLLOWING THE SAME "TRIPPING" PROCEDURE AS ABOVE. DRILLING FOREMAN AND SAFETY PERSONNEL SHOULD DETERMINE IF ALL PERSONNEL HAVE ACCESS TO PROTECTIVE EQUIPMENT.

WELL OUT OF CONTROL

THE DECISION TO IGNITE THE WELL IS THE RESPONSIBILITY OF COMPANY FOREMAN. IN THE EVENT HE IS INCAPACITATED, IT BECOMES THE RESPONSIBILITY OF THE CONTRACT

RIG TOOL PUSHER. THE DECISIONSHOULD BE MADE ONLY AS A LAST RESORT AND IN A SITUATION WHEREIT IS CLEAR THAT:

1. HUMAN LIFE AND PROPERTY ARE ENDANGERED.

2. THERE IS NO HOPE CONTROLLING THE BLOWOUT UNDER THE PREVAILING CONDITIONS AT THE WELL.

NOTIFY THE DISTRICT OFFICE IF TIME PERMITS,
BUT DO NOT DELAY IF HUMAN LIFE IS IN DANGER.

INITIATE EVACUATION PLAN.

IGNITION PROCEDURES

INSTRUCTIONS FOR IGNITING THE WELL

1. TWO PEOPLE ARE REQUIRED FOR THE ACTUAL IGNITING OPERATION. THEY MUST WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA) UNITS AND HAVE SAFETY ROPE ATTACHED. ONE MAN (TOOL PUSHER OR SAFETY ENGINEER) WILL CHECK THE ATMOSPHERE FOR EXPLOSIVE GASES WITH THE EXPLOSIMETER. THE OTHER MAN (DRILLING FOREMAN) IS RESPONSIBLE FOR IGNITING THE WELL.

2. PRIMARY METHOD TO IGNITE: 25 MM FLARE GUN WITH RANGE OF APPROXIMATELY 500 FEET.

3. IGNITE UP WIND AND DO NOT APPROACH ANY CLOSER THAN IS WARRANTED.

4. SELECT THE IGNITION SITE BEST FOR PROTECTION, AND WHICH OFFERS AN EASY ESCAPE ROUTE.

5. BEFORE FIRING, CHECK FOR PRESENCE OF COMBUSTIBLE GAS.

6. AFTER LIGHTING, CONTINUE EMERGENCY ACTION AND PROCEDURE AS BEFORE.

7. ALL UNASSIGNED PERSONNEL WILL LIMIT THEIR ACTIONS TO THOSE DIRECTED BY THE DRILLING FOREMAN.

REMEMBER: AFTER WELL IS IGNITED, BURNING HYDROGEN SULFIDE WILL CONVERT TO SULFUR DIOXIDE, WHICH IS ALSO HIGHLY TOXIC. DO NOT ASSUME THE AREA IS SAFE AFTER THE WELL IS IGNITED.

4. HIGH RISK / EMERGENCY EQUIPMENT REQUIREMENTS

A. SIGNS

1. ONE SIGN LOCATED AT LOCATION ENTRANCE WITH THE FOLLOWING LANGUAGE:

(LEASE) CAUTION - POTENTIAL POISON GAS HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION

B. WINDSOCK- WIND STREAMERS

1. ONE 36" (IN LENGTH) WINDSOCK LOCATED AT PROTECTION CENTER, AT HEIGHT VISIBLE FROM RIG FLOOR.

2. ONE 36" (IN LENGTH) WINDSOCK LOCATED AT HEIGHT VISIBLE FROM PIT AREAS.

C. HYDROGEN SULFIDE DETECTOR AND ALARMS

1. H2S MONITORS WITH ALARMS WILL BE LOCATED ON THE RIG FLOOR, AT THE BELL NIPPLE, AND AT THE FLOW LINE. ***THESE MONITORS WILL BE SET TO ALARM AT 15 PPM WITH RED LIGHT, AND TO ALARM AT 20 PPM WITH RED LIGHT AND AUDIBLE ALARM.***

2. HAND OPERATED DETECTORS WITH TUBES.

3. H2S MONITOR TESTER.

D. CONDITION FLAGS

1. ONE EACH OF ORANGE, YELLOW, AND RED CONDITION FLAGS TO BE DISPLAYED TO DENOTE CONDITIONS:

GREEN - NORMAL CONDITIONS
YELLOW - POTENTIAL DANGER
RED - DANGER, H2S PRESENT

2. CONDITION FLAG SHALL BE POSTED AT LOCATION SIGN ENTRANCE.

E. AUXILIARY RESCUE EQUIPMENT

1. STRETCHER

2. 100' LENGTH OF 5/8" NYLON ROPE.

F. MUD INSPECTION DEVICES - GARRETT GAS TRAIN OR HACH TESTER FOR INSPECTION OF SULFIDE CONCENTRATION IN MUD SYSTEM.

G. FIRE EXTINGUISHER - ADEQUATE FIRE EXTINGUISHERS SHALL BE LOCATED AT STRATEGIC LOCATIONS.

H. BLOW OUT PREVENTION EQUIPMENT - THE WELL SHALL HAVE HYDRAULIC BOP EQUIPMENT FOR THE ANTICIPATED BOTTOM HOLE PRESSURE. EQUIPMENT IS TO BE TESTED ON INSTALLATION.

I. COMBUSTIBLE GAS DETECTOR - THERE SHALL BE ONE COMBUSTIBLE GAS DETECTOR ON LOCATION AT ALL TIMES.

J. BOP TESTING - BOP AND CHOKE LINE AND KILL LINE WILL BE TESTED.

K. AUDIO SYSTEM - RADIO COMMUNICATION WILL BE AVAILABLE AT THE ***RIG, RIG FLOOR*** OR ***TRAILER*** AND ***VEHICLES***.

L. SPECIAL CONTROL EQUIPMENT - MAKE SURE OF HYDRAULIC BOP EQUIPMENT WITH REMOTE CONTROL ON GROUND AND ROTATING HEAD.

5. EMERGENCY TELEPHONE NUMBERS

CONTACT PARTY	OFFICE
OWL SWD OPERATING	
NEVIN BANNISTER	OFFICE: 214-292-2011 CELL: 214-869-9796
STATE POLICE	
EDDY COUNTY	575-748-9718
LEA COUNTY	575-392-5588
SHERIFF	
EDDY COUNTY	575-746-2701
LEA COUNTY	575-396-3611
EMERGENCY MEDICAL	
EDDY COUNTY	911 OR 575-746-2701
LEA COUNTY	911 OR 575-394-3258
EMERGENCY RESPONSE	
EDDY COUNTY	575-746-9620
LEA COUNTY	575 396-8602
FIRE DEPARTMENTS	
ARTESIA	575-746-5001
CARLSBAD	575-885-3125
HOBBS	575-397-9308
EUNICE	575-394-3258
JAL	575-395-2221
POLICE DEPARTMENTS	
ARTESIA	575-746-5001
CARLSBAD	575-885-2111
LOCO HILLS	575-677-2349
HOBBS	575-397-3365

CONTACT PARTY	OFFICE
EUNICE	575-394-0112
JAL	575-395-2501
CALLAWAY SAFETY EDDY & LEA COUNTIES	575-392-2973
WILD WELL CONTROL MIDLAND, TX	OFFICE: 432-550-6202 CELL: 432-553-1166

6. SAFETY BRIEFING

SERVICE COMPANY AND VISITING PERSONNEL

A. EACH SERVICE COMPANY THAT WILL BE ON THIS WELL WILL BE NOTIFIED IF THE ZONE CONTAINS H2S.

B. EACH SERVICE COMPANY MUST PROVIDE FOR THE TRAINING AND EQUIPMENT OF THEIR EMPLOYEES BEFORE THEY ARRIVE AT THE WELL SITE.

C. EACH SERVICE COMPANY WILL BE EXPECTED TO ATTEND A SAFETY BRIEFING.

7. EVACUATION PLAN

GENERAL REQUIREMENTS

EVACUATION ROUTES SHOULD BE ESTABLISHED PRIOR TO SPUDDING EACH WELL AND DISCUSSED WITH ALL RIG PERSONNEL.

1. DESIGNATED AREA

A. PARKING AND VISITOR AREA: ALL VEHICLES ARE TO BE PARKED AT A PRE-DETERMINED AND SAFE DISTANCE FROM THE WELLHEAD. THIS WILL BE THE DESIGNATED SMOKING AREA.

B. TWO BRIEFING AREAS ON EITHER SIDE OF THE LOCATION AT THE MAXIMUM ALLOWABLE DISTANCE FROM THE WELL BORE SO THEY OFFSET PREVAILING WINDS PERPENDICULARLY, OR AT A 45-DEGREE ANGLE IF WIND DIRECTION TENDS TO SHIFT IN THE AREA.

C. IF A MOVABLE H2S SAFETY TRAILER IS USED, IT SHOULD BE DEPT UPWIND OF EXISTING WINDS. WHEN WIND IS FROM THE PREVAILING DIRECTIONS, BOTH PROTECTION CENTERS SHOULD BE ACCESSIBLE.

2. EVACUATION IMPLEMENTATION AND PUBLIC SAFETY

TO PROTECT THE PUBLIC FROM HAZARDOUS GAS SITUATIONS ARE AS FOLLOWS:

(NOTE: REFER ALSO TO APPENDIX 'C', POTENTIALLY HAZARDOUS VOLUMES.)

1. WHEN THE COMPANY APPROVED SUPERVISOR (DESIGNATED PERSONNEL, I.E., DRILLING FOREMAN, CONSULTANT, RIG PUSHER, OR DRILLER) DETERMINES THE H2S GAS CANNOT BE LIMITED TO THE WELL LOCATION AND THE PUBLIC WILL BE INVOLVED, HE WILL ACTIVATE THE EVACUATION PLAN. ESCAPE ROUTES ARE NOTED ON AREA MAP.

2. COMPANY FOREMAN OR DESIGNATED PERSONNEL WILL NOTIFY LOCAL GOVERNMENT AGENCY THAT A HAZARDOUS CONDITION EXISTS AND EVACUATION NEEDS TO BE IMPLEMENTED.

3. COMPANY SAFETY PERSONNEL THAT HAVE BEEN TRAINED IN THE USE OF H2S DETECTION EQUIPMENT AND SELF-CONTAINED BREATHING EQUIPMENT WILL MONITOR H2S CONCENTRATIONS, WIND DIRECTIONS, AND AREA OF EXPOSURE. THEY WILL DELINEATE THE OUTER PERIMETER OF THE HAZARDOUS GAS AREA. EXTENSION TO THE EVACUATION AREA WILL BE DETERMINED FROM INFORMATION GATHERED.

4. LAW ENFORCEMENT PERSONNEL (STATE POLICE, POLICE DEPT., FIRE DEPT., AND SHERIFF'S DEPT.) WILL BE CALLED TO AID IN SETTING UP AND MAINTAINING ROAD BLOCKS. ALSO, THEY WILL AID IN EVACUATION OF THE PUBLIC IF NECESSARY.

IMPORTANT: LAW ENFORCEMENT PERSONNEL WILL NOT BE ASKED TO COME INTO A CONTAMINATED AREA. THEIR ASSISTANCE WILL BE LIMITED TO UNCONTAMINATED AREAS. CONSTANT RADIO CONTACT WILL BE MAINTAINED WITH THEM.

5. AFTER THE DISCHARGE OF GAS HAS BEEN CONTROLLED, COMPANY SAFETY PERSONNEL WILL DETERMINE WHEN THE AREA IS SAFE FOR RE-ENTRY.

IT IS THE RESPONSIBILITY OF EVERY CONTRACTOR EMPLOYED BY OWL SWD OPERATING, LLC TO HAVE ALL THIER EMPLOYEES CERTIFIED IN H2S SAFETY.

ALL PERSONNEL ON AN OWL SWD OPERATING, LLC SITE WILL BE REQUIRED TO HAVE ON THEIR PERSON (OR ON SITE) AN H2S TRAINING CERTIFICATE CARD THAT IS VALID FOR THE CURRENT DATE.

APPENDIX 'A'

TRAINING REQUIREMENTS

WHEN WORKING IN AN AREA WHERE ***ANY LEVEL*** OF HYDROGEN SULFIDE GAS (H2S) MIGHT BE ENCOUNTERED, DEFINITE TRAINING REQUIREMENTS MUST BE CARRIED OUT. ALL COMPANIES WILL INSURE THAT ALL PERSONNEL AT THE WELL SITE WILL HAVE HAD ADEQUATE TRAINING IN THE FOLLOWING:

1. HAZARDS AND CHARACTERISTICS OF H2S.
2. PHYSICAL EFFECTS OF HYDROGEN SULFIDE ON THE HUMAN BODY.
3. TOXICITY OF HYDROGEN SULFIDE AND SULFUR DIOXIDE.
4. H2S DETECTION.
5. EMERGENCY RESCUE.
6. RESUSCITATORS.
7. FIRST AID AND ARTIFICIAL RESPIRATION.
8. EFFECTS OF H2S ON METALS.
9. LOCATION SAFETY.

IT IS THE RESPONSIBILITY OF EVERY CONTRACTOR EMPLOYED BY OWL SWD OPERATING, LLC TO HAVE ALL THIER EMPLOYEES CERTIFIED IN H2S SAFETY.

ALL PERSONNEL ON A OWL SWD OPERATING, LLC SITE WILL BE REQUIRED TO HAVE ON THEIR PERSON AN H2S TRAINING CERTIFICATE CARD THAT IS VALID FOR THE CURRENT DATE.

APPENDIX 'A' (continued)

FIRST AID FOR H2S POISONING

DO NOT PANIC - REMAIN CALM - THINK !

1. HOLD YOUR BREATH. (DO NOT INHALE FIRST - JUST STOP BREATHING.)

2. PUT ON BREATHING APPARATUS.

3. REMOVE VICTIM(S) TO FRESH AIR AS QUICKLY AS POSSIBLE. (GO UP-WIND FROM SOURCE OR AT RIGHT ANGLE TO THE WIND - NOT DOWNWIND.)

4. YELL (!) ***"SOMEONE CALL 911"***.

5. BRIEFLY APPLY CHEST PRESSURE - ARM LIFT METHOD OF ARTIFICIAL RESPIRATION TO CLEAN THE VICTIM'S LUNGS AND TO AVOID INHALING ANY TOXIC GAS DIRECTLY FROM THE VICTIM'S LUNGS.

6. PROVIDE FOR PROMPT TRANSPORTATION TO THE HOSPITAL, AND CONTINUE GIVING ARTIFICIAL RESPIRATION IF NEEDED.

7. HOSPITAL(S) OR MEDICAL FACILITIES NEED TO BE INFORMED, BEFORE-HAND, OF THE POSSIBILITY OF H2S GAS POISONING - NO MATTER HOW REMOTE THE POSSIBILITY IS.

8. NOTIFY EMERGENCY ROOM PERSONNEL THAT THE VICTIM(S) HAS BEEN EXPOSED TO H2S GAS.

BESIDES BASIC FIRST AID, EVERYONE ON LOCATION SHOULD HAVE A GOOD WORKING KNOWLEDGE OF ARTIFICIAL RESPIRATION, AS WELL AS FIRST AID FOR EYES AND SKIN CONTACT WITH LIQUID H2S.

EVERYONE NEEDS TO MASTER THESE NECESSARY SKILLS.

APPENDIX 'B'

STATUS CHECK LIST

APPLICABLE TO ALL OPERATIONS WHEN LEVELS ARE EXPECTED THAT APPROACH OR ARE ABOVE 100 PPM H2S.

NOTE: ALL ITEMS ON THIS LIST MUST BE COMPLETED BEFORE DRILLING TO PRODUCTION CASING POINT.

1. SIGN AT LOCATION ENTRANCE.

2. TWO (2) WINDSOCKS LOCATED AS REQUIRED.

3. TWO (2) 30-MINUTE PRESSURE DEMAND AIR PACKS ON LOCATION FOR ALL RIG PERSONNEL AND MUD LOGGERS.

4. AIR PACK INSPECTED FOR READY USE.

5. CASCADE SYSTEM AND HOSE LINE HOOK-UP.

6. CASCADE SYSTEM FOR REFILLING AIR BOTTLES.

7. SAFE BREATHING AREAS SETUP.

8. CONDITION FLAG ON LOCATION AND READY FOR USE.

9. H2S DETECTION SYSTEM HOOKED UP.

10. H2S ALARM SYSTEM HOOKED UP AND READY.

11. OXYGEN RESUSCITATOR ON LOCATION AND TESTED FOR USE.

12. STRETCHER ON LOCATION AT SAFETY TRAILER.

13. 1 - 100' LENGTH OF NYLON ROPE ON LOCATION.

14. ALL RIG CREW AND SUPERVISORS TRAINED AS REQUIRED.

15. ALL OUTSIDE SERVICE CONTRACTORS ADVISED OF POTENTIAL H2S HAZARD ON WELL.

16. NO SMOKING SIGN POSTED.

17. HAND OPERATED H2S DETECTOR WITH TUBES ON LOCATION AND CHECKED BY DATE IS WITHIN CURRENT TIME FRAME.

APPENDIX 'B' (continued)

PROCEDURAL CHECK LIST

PERFORM DURING EACH TOUR:

1. CHECK FIRE EXTINGUISHERS TO SEE THAT THEY HAVE THE PROPER CHARGE.

2. CHECK BREATHING EQUIPMENT TO ENSURE THAT IT HAS NOT BEEN TAMPERED WITH.

3. MAKE SURE ALL THE H2S DETECTION SYSTEM IS OPERATIVE. PERFORM EACH WEEK:

4. CHECK EACH PIECE OF BREATHING EQUIPMENT TO MAKE SURE THAT DEMAND REGULATOR IS WORKING. THIS REQUIRES THAT THE BOTTLE BE OPENED AND THE MASK ASSEMBLY BE PUT ON TIGHT ENOUGH SO THAT WHEN YOU INHALE, YOU RECEIVE AIR.

5. BLOW OUT PREVENTER SKILLS ARE APPROPRIATELY COVERED BY CREW.

6. CHECK SUPPLY PRESSURE ON BOP ACCUMULATOR STAND BY SOURCE.

7. CHECK ALL SCBA UNITS FOR OPERATION:

DEMAND REGULATOR

ESCAPE BOTTLE AIR VOLUMES

SUPPLY BOTTLE OF AIR VOLUME

8. CHECK BREATHING EQUIPMENT MASK ASSEMBLY TO SEE THAT STRAPS ARE LOOSENED AND TURNED BACK, READY TO PUT ON.

9. CHECK PRESSURE ON BREATHING EQUIPMENT AIR BOTTLES TO MAKE SURE THEY ARE CHARGED TO FULL VOLUME.

10. CONFIRM PRESSURE ON ALL SUPPLY AIR BOTTLES.

11. PERFORM BREATHING EQUIPMENT DRILLS WITH ON-SITE PERSONNEL.

12. CHECK THE FOLLOWING FOR AVAILABILITY:

EMERGENCY TELEPHONE LIST

HAND OPERATED H2S DETECTORS AND TUBES

APPENDIX 'C'

GENERAL INFORMATION

TOXIC EFFECTS OF HYDROGEN SULFIDE

HYDROGEN SULFIDE IS EXTREMELY TOXIC. THE ACCEPTABLE CEILING CONCENTRATION FOR EIGHT-HOUR EXPOSURE IS 10 PPM, WHICH IS .001% BY VOLUME.

HYDROGEN SULFIDE IS HEAVIER THAN AIR (SPECIFIC GRAVITY - 1.192) AND COLORLESS. IT FORMS AN EXPLOSIVE MIXTURE WITH AIR BETWEEN 4.3 AND 46.0 PERCENT BY VOLUME.

HYDROGEN SULFIDE IS ALMOST AS TOXIC AS HYDROGEN CYANIDE AND IS BETWEEN FIVE AND SIX TIMES MORE TOXIC THAN CARBON MONOXIDE.

TOXICITY DATA FOR HYDROGEN SULFIDE AND VARIOUS OTHER GASES ARE COMPARED IN TABLE I.

PHYSICAL EFFECTS AT VARIOUS HYDROGEN SULFIDE EXPOSURE LEVELS ARE SHOWN IN TABLE II.

TABLE I

TOXICITY OF VARIOUS GASES

COMMON NAME	*CHEMICAL FORMULA*	*SPECIFIC GRAVITY*	*THRESHOLD LIMIT (1)*	*HAZARDOUS LIMIT (2)*	*LETHAL CONCENTRATION (3)*
HYDROGEN SULFIDE	**H2S**	**1.19**	**10 PPM**	**100 PPM/HR**	**600 PPM**
HYDROGEN CYANIDE	**HCN**	**0.94**	**10 PPM**	**150 PPM/HR**	**300 PPM**
SULFUR DIOXIDE	**SO2**	**2.21**	**2 PPM**	**N/A**	**1000 PPM**
CHLORINE	**CL2**	**2.45**	**1 PPM**	**150 PPM/HR**	**1000 PPM**
CARBON MONOXIDE	**CO**	**0.97**	**50 PPM**	**150 PPM/HR**	**1000 PPM**
CARBON DIOXIDE	**CO2**	**1.52**	**5000 PPM**	**5%**	**10%**
METHANE	**CH4**	**0.55**	**90,000 PPM**	**COMBUSTIBLE @ 5% IN AIR**	**N/A**

(1) THRESHOLD LIMIT - CONCENTRATION AT WHICH IT IS BELIEVED THAT ALL WORKERS MAY BE REPEATEDLY EXPOSED DAY AFTER DAY WITHOUT ADVERSE EFFECTS.

(2) HAZARDOUS LIMIT - CONCENTRATION THAT MAY CAUSE DEATH WITH PROLONGED EXPOSURE.

(3) LETHAL CONCENTRATION - CONCENTRATION THAT WILL CAUSE DEATH WITH SHORT-TERM EXPOSURE.

APPENDIX 'C' (continued)

TABLE II

PHYSICAL EFFECTS OF HYDROGEN SULFIDE

CONCENTRATION	*PHYSICAL EFFECTS*
0.001 or 10 PPM	OBVIOUS AND UNPLEASANT ODOR. SAFE FOR 8 HOURS OF EXPOSURE.
0.002 or 20 PPM	MAY STING EYES AND THROAT. MAY CAUSE FLU-LIKE SYMPTOMS.
0.010 or 100 PPM	KILLS SMELL IN 3 - 15 MINUTES. STINGS EYES AND THROAT. MAY HAVE SOME DIZZINESS AFTER PROLONGED EXPOSURE.
0.050 or 500 PPM	DIZZINESS; BREATHING CEASES IN A FEW MINUTES; NEEDS PROMPT RESUSCITATION. MAY CAUSE LUNG DAMAGE OR DEATH AFTER 4 HOURS EXPOSURE.
0.070 or 700 PPM	UNCONSCIOUS QUICKLY; DEATH WILL RESULT IF NOT RESCUED PROMPTLY.
0.100 or 1000 ppm	UNCONSCIOUS AT ONCE; FOLLOWED BY DEATH WITHIN MINUTES.

SCBA'S SHOULD BE WORN WHEN...

A. ANY EMPLOYEE WORKS NEAR THE TOP OR ON TOP OF ANY TANK UNLESS TESTS REVEAL LESS THAN 10 PPM OF H2S.

B. WHEN BREAKING OUT ANY LINE WHERE H2S CAN REASONABLY BE EXPECTED.

C. WHEN SAMPLING AIR IN AREAS TO DETERMINE IF TOXIC CONCENTRATIONS OF H2S EXISTS.

D. WHEN WORKING IN AREAS WHERE OVER 100 PPM H2S HAS BEEN DETECTED.

E. AT ANY TIME THERE IS A DOUBT AS TO THE H2S LEVEL IN THE AREA TO BE ENTERED.

APPENDIX 'C' (continued)

POTENTIALLY HAZARDOUS VOLUMES

THIS IS THE VOLUME OF H2S GAS OF SUCH CONCENTRATION THAT:

1. THE 100-PPM RADIUS OF EXPOSURE (1) INCLUDES A PUBLIC AREA (2);
2. THE 500-PPM RADIUS OF EXPOSURE INCLUDES A PUBLIC ROAD (3);
3. THE 100-PPM RADIUS OF EXPOSURE EXCEEDS 3000 FEET.

(1) RADIUS OF EXPOSURE MEANS THE RADIUS CONSTRUCTED WITH THE POINT OF ESCAPE AS ITS STARTING POINT AND ITS LENGTH.

(2) PUBLIC AREA IS A BUILDING OR STRUCTURE THAT IS NOT ASSOCIATED WITH THE WELL, FACILITY OR OPERATION FOR WHICH THE RADIUS OF EXPOSURE IS BEING CALCULATED AND THAT IS USED AS A DWELLING, OFFICE, PLACE OF BUSINESS, CHURCH, SCHOOL, HOSPITAL OR GOVERNMENT BUILDING, OR A PORTION OF A PARK, CITY, TOWN, VILLAGE OR DESIGNATED SCHOOL BUS STOP OR OTHER SIMILAR AREA WHERE MEMBERS OF THE PUBLIC MAY REASONABLY BE EXPECTED TO BE PRESENT.

(3) PUBLIC ROAD MEANS A FEDERAL, STATE, MUNICIPAL OR COUNTY ROAD OR HIGHWAY.

RADIUS OF EXPOSURE

THE RADIUS OF EXPOSURE IS CALCULATED USING THE FOLLOWING PASQUILL-GIFFORD DERIVED EQUATION (OR BY OTHER SUCH METHOD) AS FOLLOWS:

A. FOR DETERMINING THE 100-PPM RADIUS OF EXPOSURE:

$$X = [(1.589)(H2S\ CONCENTRATION)(Q)]^{(0.6258)}$$

WHERE "X" IS THE RADIUS OF EXPOSURE IN FEET, THE H2S CONCENTRATION IS THE DECIMAL EQUIVALENT OF THE MOLE OR VOLUME FRACTION OF H2S IN THE GASEOUS MIXTURE;

AND "Q" IS THE ESCAPE RATE EXPRESSED IN CUBIC FEET PER DAY (CORRECTED FOR STANDARD CONDITIONS OF 14.73 PSI ABSOLUTE AND 60 DEGREES FAHRENHEIT)

B. FOR DETERMINING THE 500-PPM RADIUS OF EXPOSURE:

$$X = [(0.4546)(H2S\ CONCENTRATION)(Q)]^{(0.6258)}$$

WHERE "X" IS THE RADIUS OF EXPOSURE IN FEET, THE H2S CONCENTRATION IS THE DECIMAL EQUIVALENT OF THE MOLE OR VOLUME FRACTION OF H2S IN THE GASEOUS MIXTURE;

AND "Q" IS THE ESCAPE RATE EXPRESSED IN CUBIC FEET PER DAY (CORRECTED FOR STANDARD CONDITIONS OF 14.73 PSI ABSOLUTE AND 60 DEGREES FAHRENHEIT)

C. FOR A WELL BEING DRILLED, COMPLETED, RECOMPLETED, WORKED OVER OR SERVICED IN AN AREA WHERE INSUFFICIENT DATA EXISTS TO CALCULATE A RADIUS OF EXPOSURE BUT WHERE H2S COULD REASONABLY BE EXPECTED TO BE PRESENT IN CONCENTRATIONS IN EXCESS OF 100 PPM IN THE GASEOUS MIXTURE, A 100 PPM RADIUS OF EXPOSURE EQUAL TO 3000 FEET IS ASSUMED.

APPENDIX 'C' (continued)

REGULATORY THRESHOLD

A. DETERMINATION OF H2S CONCENTRATION

1. THE H2S CONCENTRATION IN THE GASEOUS MIXTURE WITHIN WELLS, FACILITIES OR OPERATIONS SHALL BE DETERMINED EITHER BY TESTING, TESTING A REPRESENTATIVE SAMPLE OR USING PROCESS KNOWLEDGE IN LIEU OF TESTING. IF THE PERSON USES A REPRESENTATIVE SAMPLE OR PROCESS KNOWLEDGE, THE CONCENTRATION DERIVED FROM THE REPRESENTATIVE SAMPLE OR PROCESS KNOWLEDGE SHALL BE REASONABLY REPRESENTATIVE OF THE H2S CONCENTRATION WITHIN THE WELL OR FACILITY.

2. THE TESTS USED TO MAKE THE DETERMINATION SHALL BE CONDUCTED IN ACCORDANCE WITH APPLICABLE ASTM OR GPA STANDARDS OR BY STANDARDLY ACCEPTED METHOD.

3. IF A CHANGE OR ALTERATION MAY MATERIALLY INCREASE THE H2S CONCENTRATION IN A WELL, FACILITY OR OPERATION, TESTING SHALL BE CONDUCTED TO MAKE A NEW DETERMINATION.

B. CONCENTRATIONS DETERMINED TO BE BELOW 100 PPM - IF THE H2S CONCENTRATION IN A GIVEN WELL, FACILITY OR OPERATION IS LESS THAN 100 PPM, NO FURTHER ACTIONS SHALL BE REQUIRED ***EXCEPT AS PROVIDED IN THIS H2S CONTINGENCY PLAN CONCERNING "NORMAL / LOW H2S CONDITIONS"***.

C. CONCENTRATIONS DETERMINED TO BE ABOVE 100 PPM

1. IF THE H2S CONCENTRATION IN A GIVEN WELL, FACILITY OR OPERATION IS DETERMINED TO BE 100 PPM OR GREATER, THEN THE RADIUS OF EXPOSURE SHALL BE CALCULATED TO COMPLY WITH APPLICABLE REQUIREMENTS OF STATE AND FEDERAL LAW.

2. IF CALCULATION OF THE RADIUS OF EXPOSURE REVEALS THAT A POTENTIALLY HAZARDOUS VOLUME IS PRESENT, THE RESULTS OFTHE H2S CONCENTRATION DETERMINATION AND THE CALCULATION OF THE RADIUS OF EXPOSURE SHALL BE PROVIDED TO NMOCD AND BLM. FOR A WELL, FACILITY OR OPERATION, THE ACCOMPLISH THE DETERMINATIONS, CALCULATIONS AND SUBMISSIONS WILL BE MADE BEFORE OPERATIONS BEGIN.

D. RECALCULATION - OF THE RADIUS OF EXPOSURE SHALL BE PERFORMED IF:

1. THE H2S CONCENTRATION IN A WELL, FACILITY OR OPERATION INCREASES TO 100 PPM OR GREATER.

2. THE CONCENTRATION OF H2S INCREASES BY A FACTOR OF 25% IN AN AREA THAT PREVIOUSLY HAD A H2S CONCENTRATION OF 100 PPM OR GREATER.

IF A POTENTIALLY HAZARDOUS VOLUME IS PRESENT, THE RESULTS SHALL BE PROVIDED TO THE NMOCD AND BLM WITHIN 60 DAYS.

Post in Several Conspicuous Areas on Location

OWL SWD OPERATING, LLC

H_2S PLAN ACTION LIST

For ALL PERSONNEL Associated with ALL CONTRACTORS (Including All Visitors) Performing ANY WORK ON THIS LOCATION

REVIEW THIS ACTION LIST – YOUR LIFE OR YOUR COWORKER'S LIVES DEPEND ON IT.

COMPANY FOREMAN / DESIGNATED PERSONNEL	SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THIS PLAN. SHALL BE IN COMPLETE COMMAND DURING ANY EMERGENCY. SHALL DESIGNATE A BACK-UP.
ALL PERSONNEL	1. ON ALARM, DON ESCAPE UNIT AND REPORT IN UP WIND BRIEFING AREA. 2. CHECK STATUS OF PERSONNEL (BUDDY SYSTEM). 3. SECURE BREATHING EQUIPMENT. 4. AWAIT ORDERS FROM SUPERVISOR.
DRILLING FOREMAN / RIG OPERATOR	1. REPORT TO UP WIND BRIEFING AREA. 2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH TOOL PUSHER OR DRILLER (BUDDY SYSTEM). 3. DETERMINE H2S CONCENTRATIONS. 4. ASSESS SITUATION AND TAKE CONTROL MEASURES.
TOOL PUSHER	1. REPORT TO UP WIND SAFETY BRIEFING AREA. 2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH DRILLING FOREMAN OR DRILLER (BUDDY SYSTEM). 3. DETERMINE H2S CONCENTRATION. 4. ASSESS SITUATION AND TAKE CONTROL MEASURES.
DRILLER	1. DON ESCAPE UNIT. 2. CHECK MONITOR FOR POINT OF RELEASE. 3. REPORT TO BRIEFING AREA. 4. CHECK STATUS OF PERSONNEL (IN AN ATTEMPT TO RESCUE, USE THE BUDDY SYSTEM). 5. ASSIGNS LEAST ESSENTIAL PERSON TO NOTIFY DRILLING FOREMAN AND TOOL PUSHER BY QUICKEST MEANS IN CASE OF THEIR ABSENCE. 6. ASSUMES THE RESPONSIBILITIES OF THE DRILLING FORMAN AND TOOL PUSHER UNTIL THEY ARRIVE SHOULD THEY BE ABSENT.
DERRICK MAN FLOOR MAN #1 FLOOR MAN #2 VISITORS	WILL REMAIN IN SAFETY BRIEFING AREA UNTIL INSTRUCTED BY SUPERVISOR.
MUD ENGINEER	1. REPORT TO BRIEFING AREA. 2. WHEN INSTRUCTED, BEGIN CHECK OF MUD FOR PH AND H2S LEVEL.
SAFETY PERSONNEL	1. MASK UP AND CHECK STATUS OF ALL PERSONNEL AND SECURE OPERATIONS AS INSTRUCTED BY DRILLING FOREMAN AND REPORT TO BRIEFING AREA.

> > > ASK THE COMPANY MAN or DESIGNATED PERSON TO VIEW THE FULL H2S PLAN. < < <

Infractions of Owl Policy May Be Cause for Dismissal from Location.

APD ID: 10400024188 **Submission Date:** 02/23/2018

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Well Type: INJECTION - DISPOSAL **Well Work Type:** Drill

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

OWLL_B180009_PROPOSED_ACCESS_ROAD_20180824150137.pdf

GoldCoastSWD_Aerial_Road_rvsd_20180824151814.pdf

New road type: LOCAL

Length: 422.7 Feet **Width (ft.):** 30

Max slope (%): 1 **Max grade (%):** 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: 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 BLM cross section and plans for typical road construction. Ditching shall be implemented on both sides of the road

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: GRAVEL

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Construction Activities and Materials - Owl SWD Operating will contract experienced dirt contractors to construct the pad. Caliche to build locations and roads will be obtained from the actual well site if possible. Amounts may vary for each pad. The procedure below has been approved by BLM personnel and is anticipated to proceed as follows: a. Two (2) dozers will blade and level the surface to access caliche. Site will be rolled and compacted, one (1) backhoe to dig the cellar, one (1) water truck to water location and dust abatement and two (2) dump trucks to haul surface material. If caliche is not available onsite and have to haul caliche from a private pit, in addition to equipment mentioned there will be approximately ten (10) belly dumps and one (1) front-end loader. b. The time line to complete construction will be approximately 10 days. c. The top 6 inches of topsoil is pushed off and stockpiled along the south side of the location. Maximum height of the topsoil stock pile will be 3 '. d. An approximate 160' X 160' area is used within the proposed well site to remove caliche. e. Subsoil is removed and stockpiled within the surveyed well pad. f. When caliche is found, material will be stock piled within the pad site to build the location and road. g. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. h. There will be no interim reclamation. Once well is drilled, the stock piled top soil will be seeded in place. i. Neither caliche, nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat.
Access other construction information:

Access miscellaneous information: In the event that no caliche is found onsite, caliche will be hauled in from BLM or private caliche pits as available.
Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: No cattleguard, culvert, gates, low water crossings or fence cuts are anticipated. 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.
Road Drainage Control Structures (DCS) description: 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-offditch 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.
Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

004a_2mile_AORMap_GoldCoast3_20170530_20180219141131.pdf

Existing Wells description:

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Salt water disposal well facility. Owl will submit detailed facility design drawings upon approval of APD.

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: COMMERCIAL

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 30000

Source volume (acre-feet): 3.866793

Source volume (gal): 1260000

Water source and transportation map:

WaterSourceMap_Fulfer_GoldCoast_a_20180823103234.pdf

Water source comments: The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from a private source, Fulfer Ranch, LLC (575) 631- 0522 or Mesquite Services (575) 395-2330. Other sources are available - Fulfer has committed to project for current planning. No water well will be drilled on the location.

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche: Primary source of caliche to build locations and roads will be turning over location. This means, caliche will be obtained from the actual well site. If not available on site, caliche will be hauled from the nearest State approved caliche pit located in Sec 20, T24S, R33E. Alternate source will be caliche pit from Mark McCloy (806) 683-6990.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: SEWAGE

Waste content description: Human waste.

Amount of waste: 100 gallons

Waste disposal frequency : Weekly

Safe containment description: Porta-Jon

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Eunice, NM

Waste type: GARBAGE

Waste content description: Site garbage, general household trash

Amount of waste: 100 pounds

Waste disposal frequency : Weekly

Safe containment description: Commercial trash bin

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Disposal type description:

Disposal location description: Eunice, NM

Waste type: DRILLING

Waste content description: Drill cuttings/ returns.

Amount of waste: 1500 barrels

Waste disposal frequency : Weekly

Safe containment description: A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud bins and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240. B. Drilling fluids will be contained in steel mud pits and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240. C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility. R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240. D. Water will not be produced from the well. E. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill-Lea Landfill LLC. Located at Mile Marker 64, Highway 62-180 East, P O Box 3247, Carlsbad, NM 88221. No toxic waste or hazardous chemicals will be produced by this operation. F. Human waste and grey water will need to be properly contained and disposed of. Proper disposal and elimination of waste and grey water may include but are not limited to portable septic systems and/or portable waste gathering systems (i.e. portable toilets). G. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: 4507 West Carlsbad Highway, Hobbs, NM 88240

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Latshaw_Rig_8_20180223142600.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:**

Multiple Well Pad Number:

Recontouring attachment:

Drainage/Erosion control construction: 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-offditch 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.

Drainage/Erosion control reclamation: Same techniques downsize to long term disturbance areas.

Well pad proposed disturbance (acres): 8.26
Road proposed disturbance (acres): 0.291
Powerline proposed disturbance (acres): 0
Pipeline proposed disturbance (acres): 0
Other proposed disturbance (acres): 0
Total proposed disturbance: 8.551

Well pad interim reclamation (acres): 6.2
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 0
Other interim reclamation (acres): 0
Total interim reclamation: 6.2

Well pad long term disturbance (acres): 2.06
Road long term disturbance (acres): 0.291
Powerline long term disturbance (acres): 0
Pipeline long term disturbance (acres): 0
Other long term disturbance (acres): 0
Total long term disturbance: 2.351

Disturbance Comments: Interim Reclamation will take place within six months after the well has been completed. The pad

will be downsized by reclaiming the areas not needed for production operations. The portions of the pad that are not needed for production operations will be recontoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.

Reconstruction method: Remove any excess caliche - restore topsoil from stockpile. Use appropriate agriculture equipment and methods to reclaim, contour and reseed as necessary.

Topsoil redistribution: Redistribute original volumes of stockpiled topsoil as necessary. Use appropriate agriculture equipment and methods to reclaim, contour and reseed as necessary.

Soil treatment: Fertilize and enzyme treatment as advised.

Existing Vegetation at the well pad: Natural mesquite, sage and prairie grass pasture typical of region.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Natural mesquite, sage and prairie grass pasture typical of region.

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Operator Name: OWL SWD OPERATING LLC

Well Name: GOLD COAST 26 FEDERAL **Well Number:** 3

Section 12 - Other Information

Right of Way needed? YES **Use APD as ROW?** YES

ROW Type(s): 281001 ROW - ROADS,289001 ROW- O&G Well Pad

ROW Applications

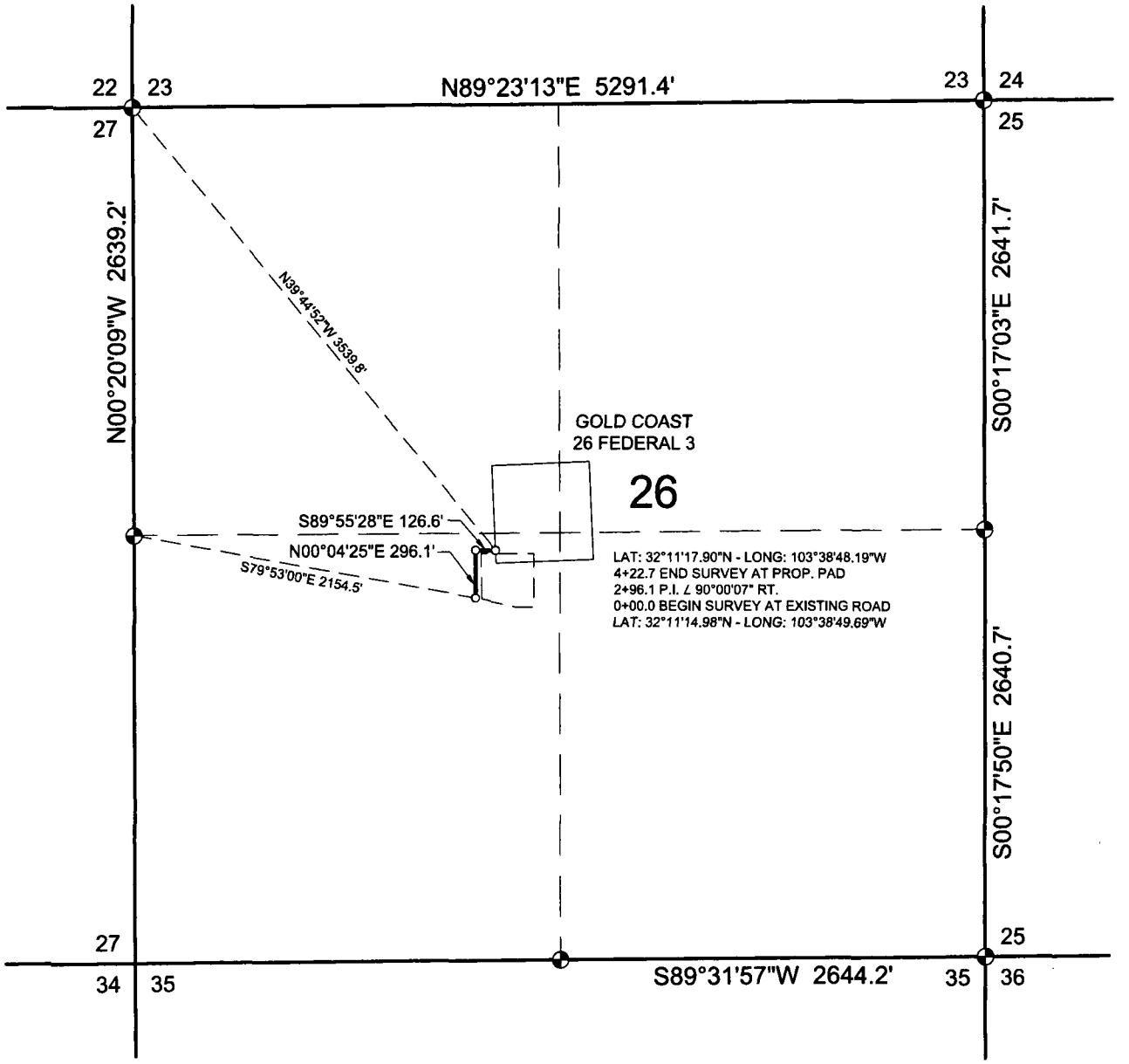
SUPO Additional Information: If required, Owl SWD Operating will submit a separate SF-299 for the Road ROW.

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

PROPOSED ACCESS ROAD MAP



300 0 300 600 FEET

SCALE: 1" = 300'

SECTION 26, T 24 S, R 32 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 2612' FNL & 2643' FWL

OPERATOR: OWL SWD OPERATING, L.L.C.

WELL NAME: GOLD COAST 26 FEDERAL 3

N
W E
S

DRIVING DIRECTIONS:

From Jct. of County Road J-1 "Orla Hwy" and State Hwy 128 30 miles west of Jal. Go east on State Hwy 128 for 0.6 miles to a lease road right. Then go south on lease road for 1.6 miles and southeast 0.8 miles to a well pad & the location flag is to the north approximately 400 feet.

ASCENT GEOMATICS SOLUTIONS
COLLECT-ANALYZE-DELIVER
GEOSPATIAL DATA
4500 W. ILLINOIS STE:202
MIDLAND, TEXAS 79705
(432) 756-5680

OILFIELD WATER LOGISTICS

OWL SWD OPERATING, L.L.C.

JOB No.: B18.OWLL

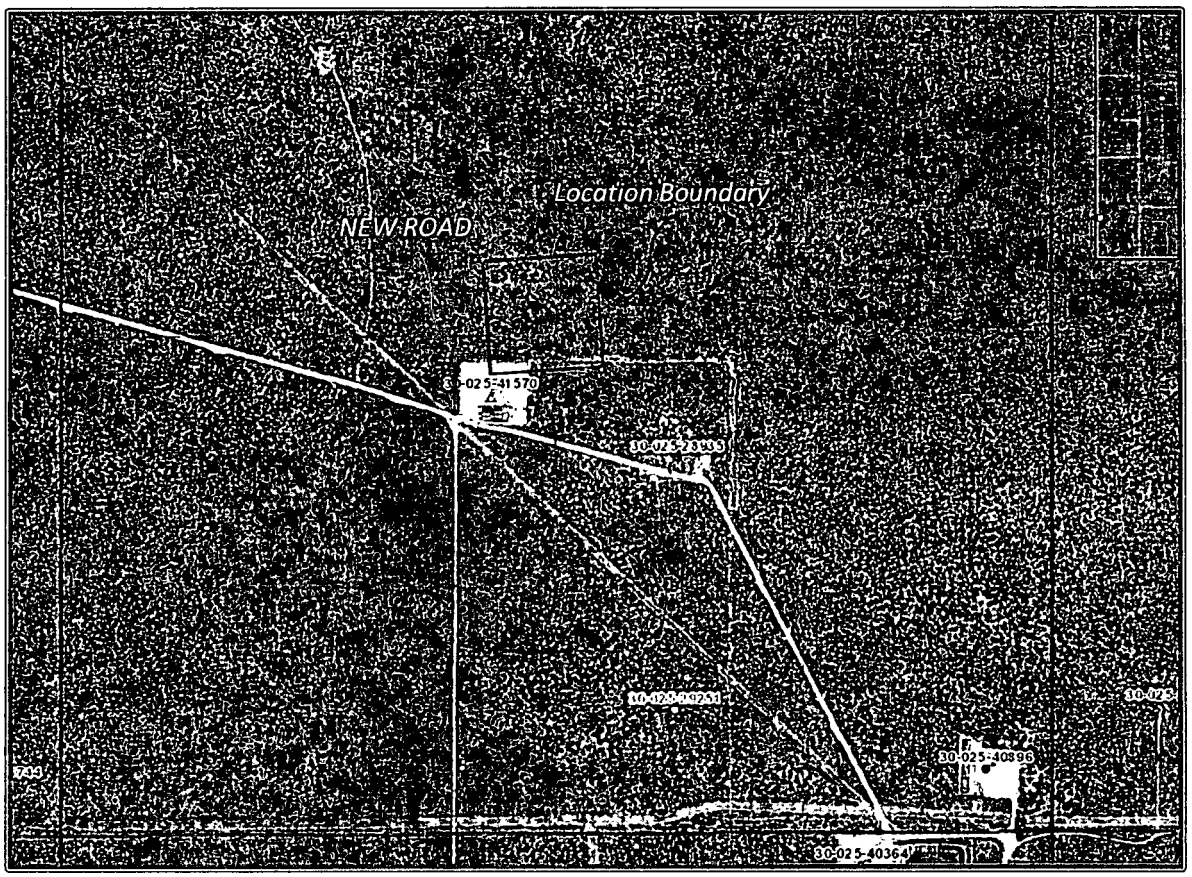
Gold Coast 26 Fed SWD No.3

API No.30-025-xxxxx

ULSTR F-26-24S-32E

Owl SWD Operating, LLC

Aerial w/ Lease Road and Well Pad

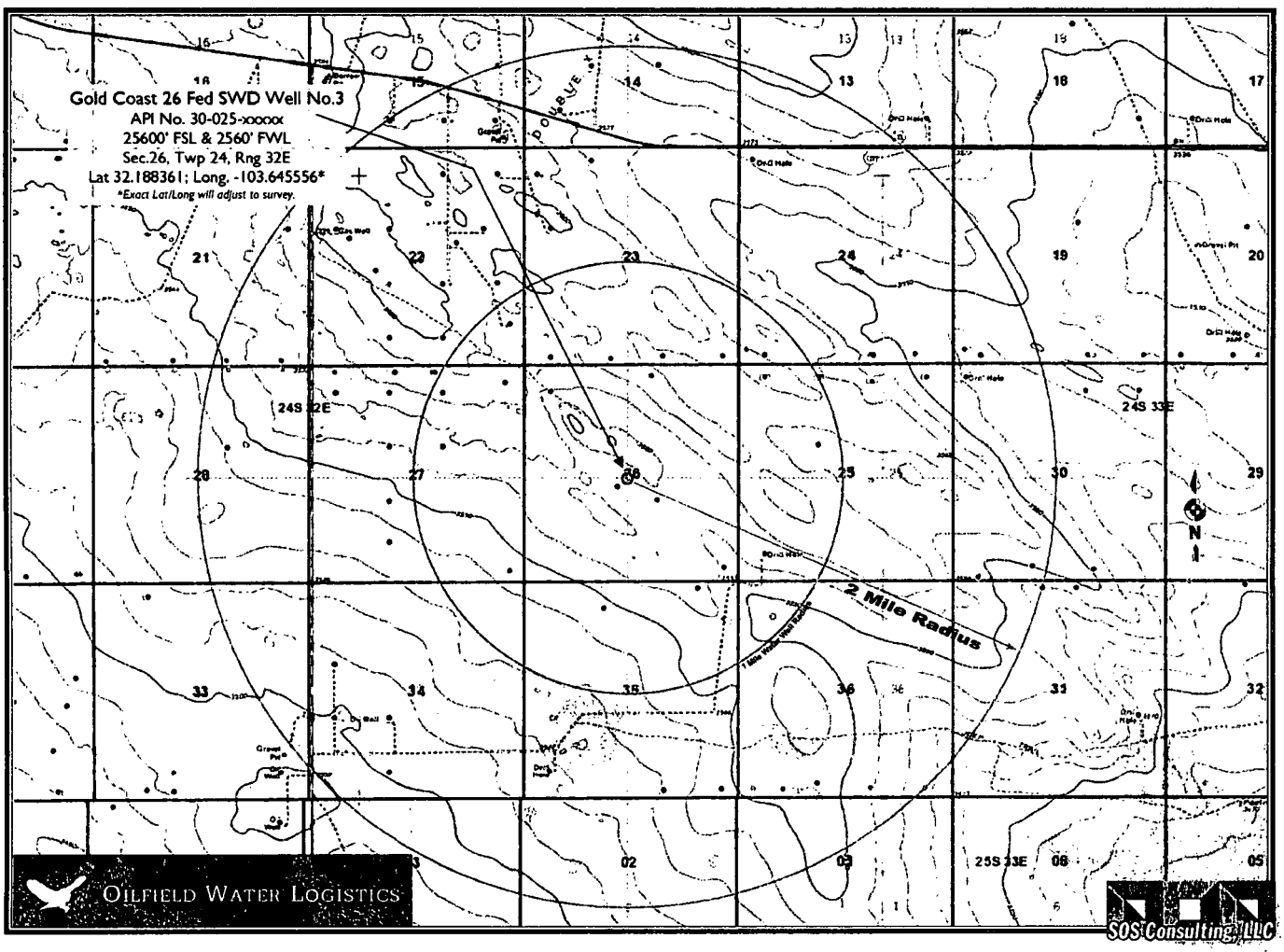


Total lease road distance is 422.7 feet x 30 feet road easement = 25.618 rods.

Note: ***New Road and Location in this view is approximate and intended as a visual guideline.*** *Positioning was derived by overlaying the surveyor's exact boundary in relation to the well head on the survey documents. Imagery tilt and true north were not factored in.*

Gold Coast 26 Federal No.3 SWD - Area of Review / 2 Miles

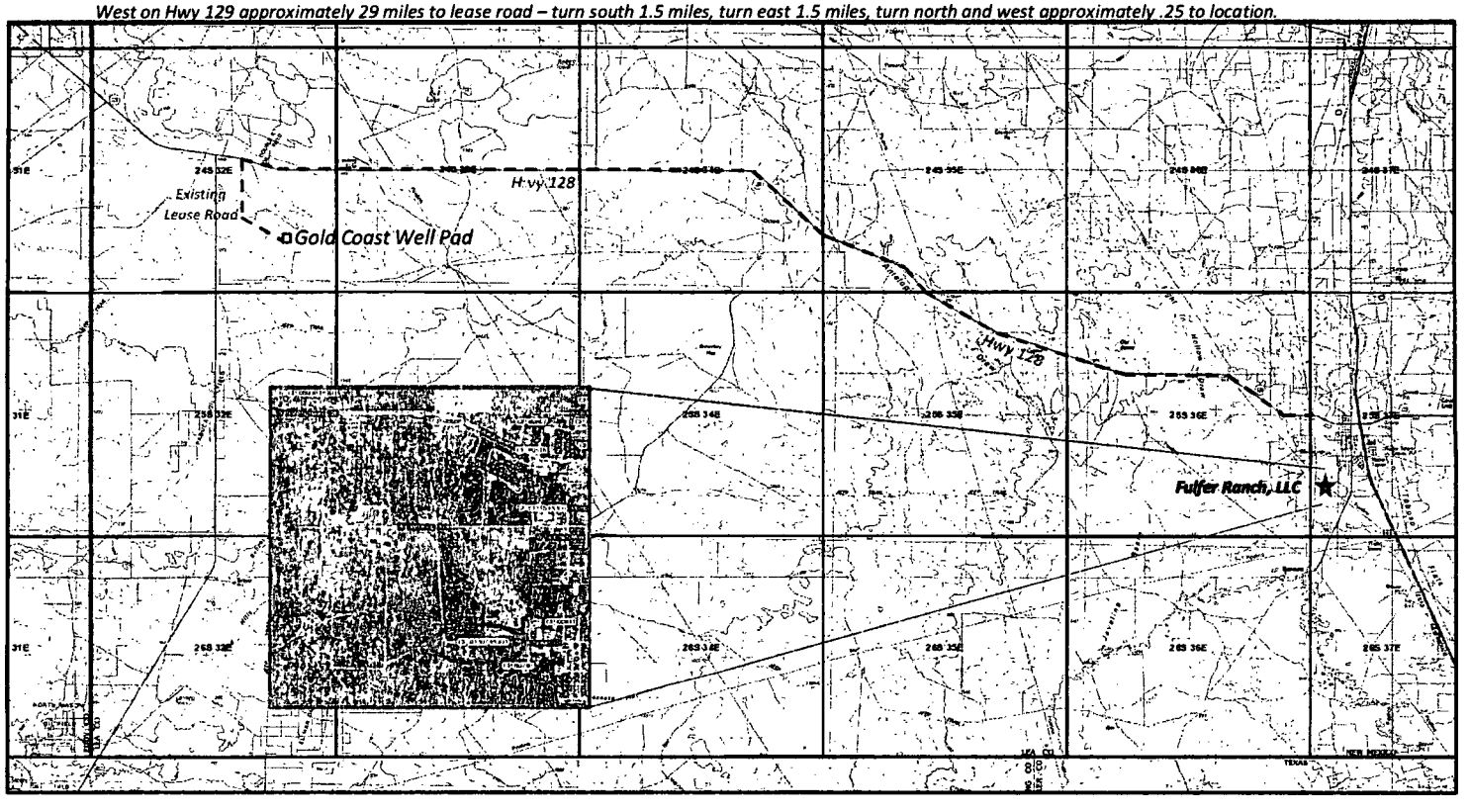
(Attachment to NMOCD Form C-108 - Item V)



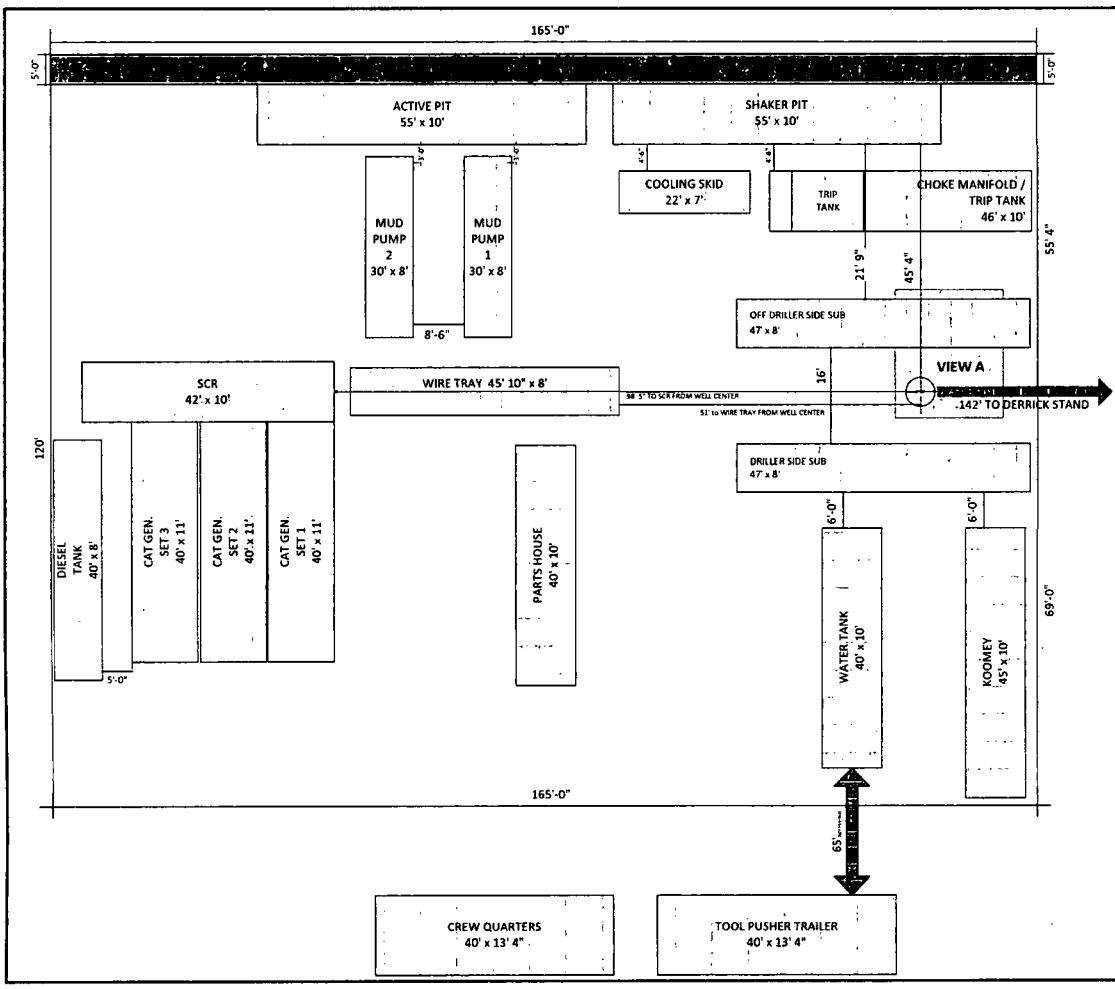
OWL SWD OPERATING, LLC - *GOLD COAST SWD*

FRESH WATER TRANSPORTION FROM FULFER RANCH, LLC

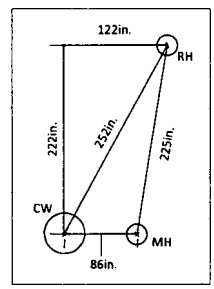
West on Hwy 129 approximately 29 miles to lease road – turn south 1.5 miles, turn east 1.5 miles, turn north and west approximately .25 to location.



Fulfer Ranch, LLC - Water Station in 30-25S-37E. Several water wells producing out of section.
Source Well/ Delivery point for trucking access shown on inset above.



VIEW A



NOTES:
MOUSE HOLE IS AT A 5 DEGREE SLANT AWAY FROM WELL.

RAT HOLE IS 27 FEET DEEP AT 10 DEGREE SLANT AWAY FROM WELL

RIG 8
1600 HP

Latshaw DRILLING

November 21, 2011

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

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?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

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?

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?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

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?

Other regulatory requirements attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

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:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

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?

Is the reclamation bond a rider under the BLM bond?

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):

Injection well mineral owner:

AFMSS

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

Bond Info Data Report

12/03/2018

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001181

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: