

HOBBS OCD

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30-025-40942

One Source Environmental

# C-144 Closure Plan for the Quail State 16 #7H drilling pit

Prepared for Fasken Oil & Ranch, LTD Midland, Texas

*commented*

*Jeffrey Sekins*

Environmental Specialist

NMOC - DIST 1

4/4/14

Prepared by Julio C Martinez  
4-1-2014

FEB 01 2016

3/31

30 025 40942

## One Source Environmental

9205 WCR 127  
Midland, TX 79706  
Office (432) 561-8804  
Cell (432) 202-3096

## Pit Closure

Tracking # 10182  
Project Quail State 16 7H deep trench burial

April 1, 2014

### Description:

Quail State 16 Com 7H drilling pit  
SHL – 200' FSL & 225' FEL, Sec 16, T20S, R34E  
BHL – 330' FNL & 330' FEL Sec 16, T20S, R34E  
Lea County, NM

### To:

Jeffrey Leking, Environmental Engineer  
NMOCD Hobbs, NM

### Dear Mr. Leking,

On behalf of Fasken Oil & Ranch, LTD. **One Source Environmental** submits the attached C-144 application for the closure of the above referenced drilling pit. Our current schedule calls for the dirt work to start in 7 to 14 days.

Please note the following:

1. We have referenced the original siting plan on Form C-144 submitted and approved by Geoffrey Leking on 2/1/2013 – OCD Permit Number: PI-05658
2. We anticipate "Trench Burial" of the stabilized pit contents to be in conformance with the applicable NMOCD Rules.
3. This letter and application is copied to the State Land Office **to notify the surface landowner** of the operator's intent to use the deep trench burial procedures to bury the drilling pit.
4. In compliance with the requirements set out in Subsection E of 19.15.17.10 NMAC, we are giving notice of deep trench burial at least 72 hours, but not more than one week prior to any closure operations.
5. We propose to deep bury the contents of the drilling pit in a 120' x 120' x 18' poly lined trench per requirements set forth in 19.15.17.13 NMAC.
6. Once the burial has been completed, a closure report will be submitted and Form C-103 will be filed with the division. A steel marker will be erected at least 4' above grade with all applicable information.

**One Source Environmental** would like to thank you for your prompt attention to this matter. If you should have any questions/comments, please feel free to contact me @ the above numbers.

Sincerely,

*Julio C Martinez*

Julio C Martinez, Project Manager

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# Attachment to Form C-144

Deep Trench Burial

## Legals

**API Number:** 30-025-40942

**ULSTR:** P-16-20S-34E

**Footages** 200 FSL & 225 FEL

**Well Name & Number:** QUAIL 16 STATE No. 007H

**Operator:** FASKEN OIL & RANCH LTD

## Siting Criteria Compliance Demonstration

- Has been demonstrated by Form C-144 submitted and approved by Geoffrey Leking on 2/1/2013 – OCD Permit Number: PI-05658

## Proof of Surface Owner Notice

- See attached letter

## Construction/Design Plan

A trench will be constructed as described below and in compliance with Subsection K of 19.15.17.11 NMAC

- An excavation will be dug out approximately 120' x 120' x 18'
- A geotextile underlayment will be installed if there is evidence of rocks, sharp edges, or irregularities that could rupture or tear the geomembrane.
- The trench will be lined with a 20-mil string reinforced LLDPE liner.
- The liner seams will be oriented up and down and parallel to the line of maximum slope.
- There will be sufficient liner installed to reduce the stress-strain on the liner and the outer edges will be secured for the deposit of the excavated waste material into the trench

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## Protocols and Procedures

The procedure for the deep burial of the pit are based on the appropriate requirements set forth in 19.15.17.13 NMAC. They are outlined below;

- Ensure that all free liquids have been removed prior to commencing the pit closure.
- All pit contents will be removed and placed into a division approved facility (deep trench burial), if needed the contents will be stabilized/solidified with earthen material and zeolite in a ratio not to exceed 3:1 (3 parts earthen material/zeolite to 1 part pit contents).
- 5 composite samples of the pit contents will be collected to ensure that the parameters listed in Table II of 19.15.17.13 NMAC are met

Closure criteria for this Burial Trench (based on depth to ground water which is >100 feet)	
Constituent	Limit
Chloride	80,000 mg/kg
TPH	2,500 mg/kg
GRO + DRO	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 kg/kg
If the analytical results are higher than concentrations shown above, then closure will proceed in accordance with Subsection C of 19.15.17.13 NMAC (Dig and Haul)	

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- 5 composite samples will be collected beneath the pit to ensure that the parameters listed in Table I of 19.15.17.13 NMAC are met

Closure criteria for soils beneath pits where the contents have been removed (based on depth to ground water which is >100 feet)	
Constituent	Limit
Chloride	20,000 mg/kg
TPH	2,500 mg/kg
GRO + DRO	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg
If the analytical results are higher than concentrations shown above, then closure will halt until approval has been given by the division to continue	

## Confirmation and Soil Sampling Plan

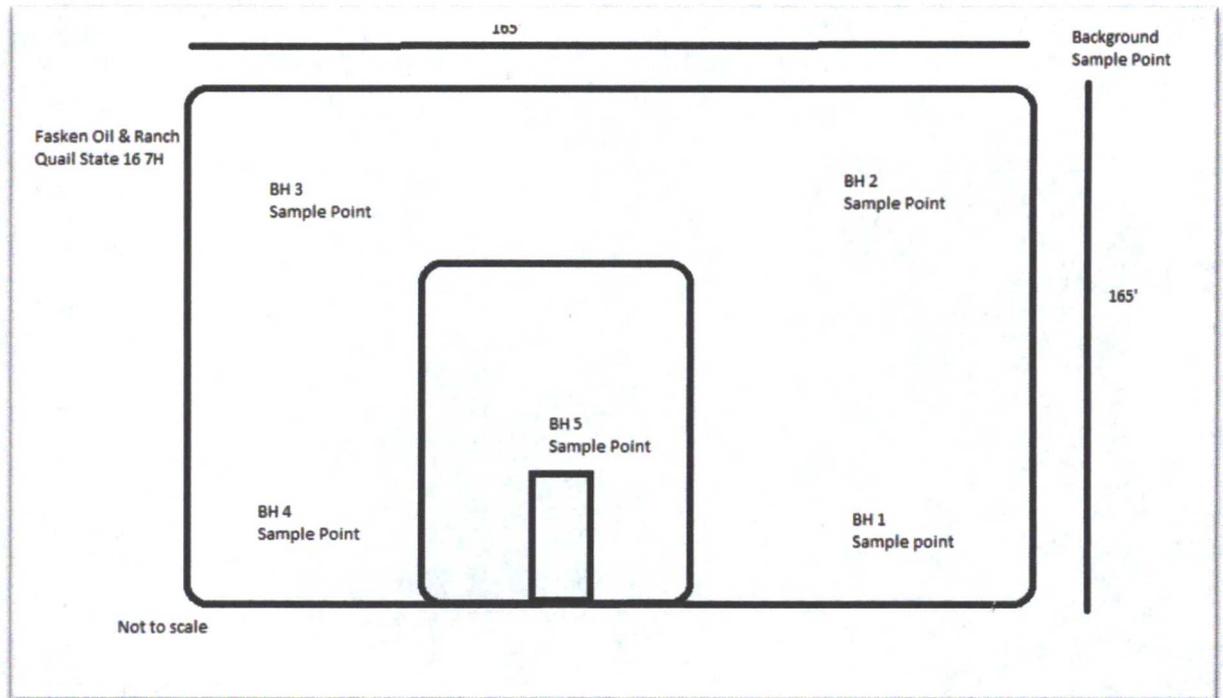
Sample ID	Depth	Analytical
BH 1	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 2	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 3	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 4	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 5	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
Background	Surface	Chlorides, TPH, BTEX, GRO + DRO, Benzene

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### Waste Material Sampling Plan

Prior to closure, a five-point (minimum) random composite samples of the residual solids in the pit will be tested in a laboratory to demonstrate that the stabilized material will not exceed the contaminant concentrations listed in Table II of 19.15.17.13 NMAC mixed in a ratio of 3:1 with the earth material to be used for mixing and stabilization of the residual cuttings and mud.

### Soil Cover and Design of Pit Location and Trench

At least 3-feet of compacted, uncontaminated, non-waste containing earthen fill with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0 will be placed over the pit and the deep trench burial pit. The soil cover will include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater, over the 3-foot earth material. The site will be recontoured to blend with the surrounding topography and to prevent erosion of the cover and ponding over the cover.

### Site Reclamation and Re-vegetation Plan

Top soils and sub soils will be replaced to their original relative positions and contoured so as to achieve erosion control, long term stability and preservation of surface water flow patterns. Reseeding will commence on the first favorable growing season following closure.

The operator will notify the division when the surface grading work element of reclamation is complete.

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The operator will notify the division when the site meets the surface owner's requirements or exhibits a uniform vegetative cover that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

The operator will notify the division when the reclamation and re-vegetation are complete.

### Closure Report

Within 60 days of closure completion, we will submit a

- Closure report on form C-144, with all necessary attachments
- A certification that all information in the report and attachments are correct, that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan
- A plat of the pit location on form C-105 and a separate C-105 showing the exact location of the trench.
- We will place at the center of an onsite burial trench a steel marker that is not less than four inches in diameter. It will be placed at the bottom of a three-foot deep hole (minimum) that is filled with cement to secure the marker at least four feet above mean ground level which permanently displays the operator name, lease name, well number, unit letter, section, township and range in welded or stamped legible letters/numbers

### Timing of Closure

"The operator will close the temporary pit within 6 months from the date the drilling or workover rig was released from the site. This date will be noted on form C-105 or C-103 filed with the division upon the well's or workover's completion".

## Leking, Geoffrey R, EMNRD

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**From:** Leking, Geoffrey R, EMNRD  
**Sent:** Friday, April 04, 2014 2:48 PM  
**To:** 'Julio C Martinez'  
**Subject:** RE: Quail State 16 Com 7H deep trench burial Attachment to Form C144 DRAFT

Julio

Comments Re: C-144 Closure Plan for the Quail State 16 #7H drilling pit, Prepared for Fasken Oil & Ranch, LTD Midland, Texas, Prepared by Juio C Matinez, 4-1-2014:

- 1) Construction/Design, pg. 2 – Include language that addresses the 19.15.17.11. K. (4) requirement that states “Prior to field seaming, the operator shall overlap liners four to six inches...” and “...Qualified personnel shall preform field welding and testing.”.
- 2) Protocols and Procedures , pg.3 – Include language that addresses the 19.15.17.13 D.(4) requirement that states “...The waste mixture must pass the paint filter liquids test (EPA SW-846, Method 9095 or other test methods approved by the division).
- 3) Protocols and Procedures , pg.3 and pg.4, bullets 3 and 4 – Change “5 composite samples...” to “A 5 point composite sample...”
- 4) Confirmation and Soil Sampling Plan, pg. 4 – The 6” depth stated is fine for soils, but the waste materials must be sampled for their entire thickness which may exceed 6”. Please clarify and add language if necessary.
- 5) Waste Material Sampling Plan pg.5 , line 1-Change “samples” to “sample”.
- 6) Waste Material Sampling Plan pg.5 – Include the language as required in 2) above.
- 7) Soil Cover and Design of Pit Location and Trench, pg.5 – Include language that addresses the requirements of 19.15.17.13 D. (8) (a) & (b) which states “Upon achieving all applicable waste stabilization in the temporary pit or transfer of stabilized wastes to the temporary pit or burial trench, the operator shall (a) fold the outer edges of the trench liner to overlap the waste material into the trench prior to the installation of the geomembrane cover; (b) install a geomembrane cover over the waste material in the lined trench or temporary pit, the operator shall install the geomembrane cover in a manner that prevents the collection of infiltration waste into the lined trench or temporary pit and onto the geomembrane cover after the soil cover is in place, the geomembrane cover shall consist of a 20-mil string reinforced LLDPE liner or equivalent cover the appropriate division district office approves, the geomembrane cover shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions; cover compatibility shall comply with EPA SW-846 Method 9090A.”.
- 8) General Comment – Due to the difference in siting requirements between those stated on the Form C-144 July 21, 2008 and the Form C-144 Revised June 6, 2013, the company will be required to submit a fully completed Form C-144 Revised June 6, 2013 and include the documentation to validate the answers to the statements found under Section 15. Siting Criteria (regarding on-site closure methods only). These should include graphics that address each criteria including, but not limited to, topographic maps, photographs from visual inspection, aerial photographs, satellite images, NM Office of the State Engineer – IWATER database info , NMOCD Trend Map Data or information provided to the operator by OCD personnel based on this map, US Fish and Wildlife Wetland Identification maps, NM EMNRD- Mining and Mineral Division maps, NM Bureau of Geology & Mineral Resources maps, USGS maps, NM Geological Society maps, and FEMA or insurance maps.

Please contact me if you have any questions. Thank you.

Geoffrey Leking

Environmental Specialist  
NMOCD-Hobbs  
1625 N. French Drive  
Hobbs, NM 88240  
Office: (575) 393-6161 Ext. 113  
Cell: (575) 399-2990  
email: [geoffreyr.leking@state.nm.us](mailto:geoffreyr.leking@state.nm.us)

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**From:** Julio C Martinez [<mailto:jmartinez@onesourceindustrial.com>]  
**Sent:** Monday, March 31, 2014 5:30 AM  
**To:** Leking, Geoffrey R, EMNRD  
**Subject:** Quail State 16 Com 7H deep trench burial Attachment to Form C144 DRAFT

Mr. Leking,

I spoke with you on the phone over the trench burial of this drilling pit awhile ago. I have finally completed the C144 attachment and would like your input before I send you an official copy.

I certainly appreciate your time.

Respectfully yours,

*Julio C Martinez, RSO*

Julio C Martinez, RSO  
One Source Environmental  
[jmartinez@onesourceindustrial.com](mailto:jmartinez@onesourceindustrial.com)  
Cell: (432) 202-3096  
Office: (432) 561-8804

HOBBS OCD

APR 21 2014

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One Source Environmental

# C-144 Closure Plan for the Quail State 16 #7H drilling pit

Prepared for Fasken Oil & Ranch, LTD Midland, Texas

Prepared by Julio C Martinez  
4-1-2014

4/21

## One Source Environmental

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April 1, 2014

### Description:

Quail State 16 Com 7H drilling pit  
SHL – 200' FSL & 225' FEL, Sec 16, T20S, R34E  
BHL – 330' FNL & 330' FEL Sec 16, T20S, R34E  
Lea County, NM

### To:

Jeffrey Leking, Environmental Engineer  
NMOCD Hobbs, NM

**Dear Mr. Leking,**

On behalf of Fasken Oil & Ranch, LTD. **One Source Environmental** submits the attached C-144 application for the closure of the above referenced drilling pit. Our current schedule calls for the dirt work to start in 7 to 14 days.

Please note the following:

1. We anticipate "Trench Burial" of the stabilized pit contents to be in conformance with the applicable NMOCD Rules.
2. This letter and application is copied to the State Land Office **to notify the surface landowner** of the operator's intent to use the deep trench burial procedures to bury the drilling pit.
3. In compliance with the requirements set out in Subsection E of 19.15.17.10 NMAC, we are giving notice of deep trench burial at least 72 hours, but not more than one week prior to any closure operations.
4. We propose to deep bury the contents of the drilling pit in a 120' x 120' x 18' poly lined trench per requirements set forth in 19.15.17.13 NMAC.
5. Once the burial has been completed, a closure report will be submitted and Form C-103 will be filed with the division. A steel marker will be erected at least 4' above grade with all applicable information.

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Sincerely,

*Julio C Martinez*

Julio C Martinez, Project Manager

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

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

Form C-144  
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application

- Type of action:  Below grade tank registration  
 Permit of a pit or proposed alternative method  
 Closure of a pit, below-grade tank, or proposed alternative method  
 Modification to an existing permit/or registration  
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

**Instructions:** Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: Fasken Oil & Ranch OGRID #: 151416  
Address: 303 W. Wall St. Ste. 1800, Midland, TX 79701-5116  
Facility or well name: Quail "16" State No. 7H  
API Number: 30-025-40942 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr P Section 16 Township 20S Range 34E County: Lea  
Center of Proposed Design: Latitude N 32° 34' 00.49" Longitude W 103° 33' 26.61" NAD:  1927  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2.  
 **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary:  Drilling  Workover  
 Permanent  Emergency  Cavitation  P&A  Multi-Well Fluid Management Low Chloride Drilling Fluid  yes  no  
 Lined  Unlined Liner type: Thickness \_\_\_\_\_ mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_  
Tank Construction material: \_\_\_\_\_  
 Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
 Visible sidewalls and liner  Visible sidewalls only  Other \_\_\_\_\_  
Liner type: Thickness \_\_\_\_\_ mil  HDPE  PVC  Other \_\_\_\_\_

4.  
 **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  
**Fencing:** Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  
 Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  
 Four foot height, four strands of barbed wire evenly spaced between one and four feet  
 Alternate. Please specify \_\_\_\_\_

6. **Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- Screen  Netting  Other \_\_\_\_\_
- Monthly inspections (If netting or screening is not physically feasible)

7. **Signs:** Subsection C of 19.15.17.11 NMAC

- 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- Signed in compliance with 19.15.16.8 NMAC

8. **Variations and Exceptions:**

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

**Please check a box if one or more of the following is requested, if not leave blank:**

- Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9. **Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

**Instructions:** The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

**General siting**

**Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- NM Office of the State Engineer - iWATERS database search;  USGS;  Data obtained from nearby wells

- Yes  No
- NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

- Yes  No
- NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

- Yes  No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

- Yes  No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

- Yes  No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

- Yes  No

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

- Yes  No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

- Yes  No

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

- Yes  No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

- Yes  No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

- Yes  No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes  No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Permanent Pit or Multi-Well Fluid Management Pit**

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes  No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

10.

**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

11.

**Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- A List of wells with approved application for permit to drill associated with the pit.
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

12.

**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

**Proposed Closure:** 19.15.17.13 NMAC

*Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.*

- Type:  Drilling  Workover  Emergency  Cavitation  P&A  Permanent Pit  Below-grade Tank  Multi-well Fluid Management Pit  
 Alternative
- Proposed Closure Method:  Waste Excavation and Removal  
 Waste Removal (Closed-loop systems only)  
 On-site Closure Method (Only for temporary pits and closed-loop systems)  
 In-place Burial  On-site Trench Burial  
 Alternative Closure Method

14.

**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

*Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.*

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

16. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17. **Operator Application Certification:**  
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Julio C Martinez Title: Consultant

Signature: Julio C Martinez Date: 4/7/2014

e-mail address: jmartinez@onesourceindustrial.com Telephone: 432-202-3096

18. **OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature: \_\_\_\_\_ Approval Date: \_\_\_\_\_

Title: \_\_\_\_\_ OCD Permit Number: \_\_\_\_\_

19. **Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC  
*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

Closure Completion Date: \_\_\_\_\_

20. **Closure Method:**  
 Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method  Waste Removal (Closed-loop systems only)  
 If different from approved plan, please explain.

21. **Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice (surface owner and division)
- Proof of Deed Notice (required for on-site closure for private land only)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure)
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD:  1927  1983

22.

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

**One Source Environmental**

9205 WCR 127  
 Midland, TX 79706  
 Office (432) 561-8804  
 Cell (432) 202-3096

**Pit Closure**

Tracking # 10182  
 Project Quail State 16 7H deep trench burial

# Attachment to Form C-144

Deep Trench Burial

## Legals

**API Number:** 30-025-40942

**ULSTR:** P-16-20S-34E

**Footages** 200 FSL & 225 FEL

**Well Name & Number:** QUAIL 16 STATE No. 007H

**Operator:** FASKEN OIL & RANCH LTD

## Siting Criteria Compliance Demonstration (Section 15)

Criteria	Answer	Source Material
Ground Water is < 25'	No	Per Geoffrey Lecking, Environmental Engineer, OCD Hobbs – the ground water is found at 135' (see C-144 dated 02/01/2013 - Permit # PI-05658)
Ground water is between 25'-50'	No	Per Geoffrey Lecking, Environmental Engineer, OCD Hobbs – the ground water is found at 135'
Ground Water is > 100' below bottom of buried waste	Yes	Per Geoffrey Lecking, Environmental Engineer, OCD Hobbs – the ground water is found at 135'
Within 100' of continuously flowing water course or 200' of any other significant watercourse	No	Nearest watercourse is > 300' from location – per USFW National Wetlands Inventory (see attached). Certification: A visual inspection of the immediate area has been made and there are no known watercourses within 1 mile radius of the well location.
Within 300 feet from a permanent residence, school, hospital, institution or church	No	See attached "Google Map" showing the surrounding area. Certification: A visual inspection of the immediate area has been made and there are no permanent

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		residences, schools, hospitals, institutions or churches within 300' of the well location.
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes	No	There are no known water wells within 300 horizontal feet of the well location – per USFW National Wetlands Inventory (see attached). Certification: A visual inspection of the immediate area has been made and there are no known water wells within 300 horizontal feet of the well location.
Written confirmation or verification from the municipality	No	This well location does not fall within any municipalities.
Within 300' of a wetland	No	Nearest wetland is > 500' from location – per USFW National Wetlands Inventory (see attached). Certification: A visual inspection of the immediate area has been made and there are no known wetlands within 1 mile radius of the well location.
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978. Section 3-7-3 as amended	No	This well location does not fall within any municipalities.
Within the area overlying a subsurface mine	No	See letter from Larry J Rybal of the State Land Office signed 1/29/2013
Within an unstable area	No	See attached "Geologic Map of New Mexico"
Within a 100-flood plan	No	FEMA reports that a 100-year flood plain map has not been constructed for this area. Certification: A visual inspection of the immediate area has been made and there are no indications of that flooding or standing water would occur.
Form C-102		Form c-102 is attached showing the pit location. The latitude and longitude is shown on the plat. This data reference is the center of the pit.

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## Pit Closure

Tracking # 10182  
Project Quail State 16 7H deep trench burial

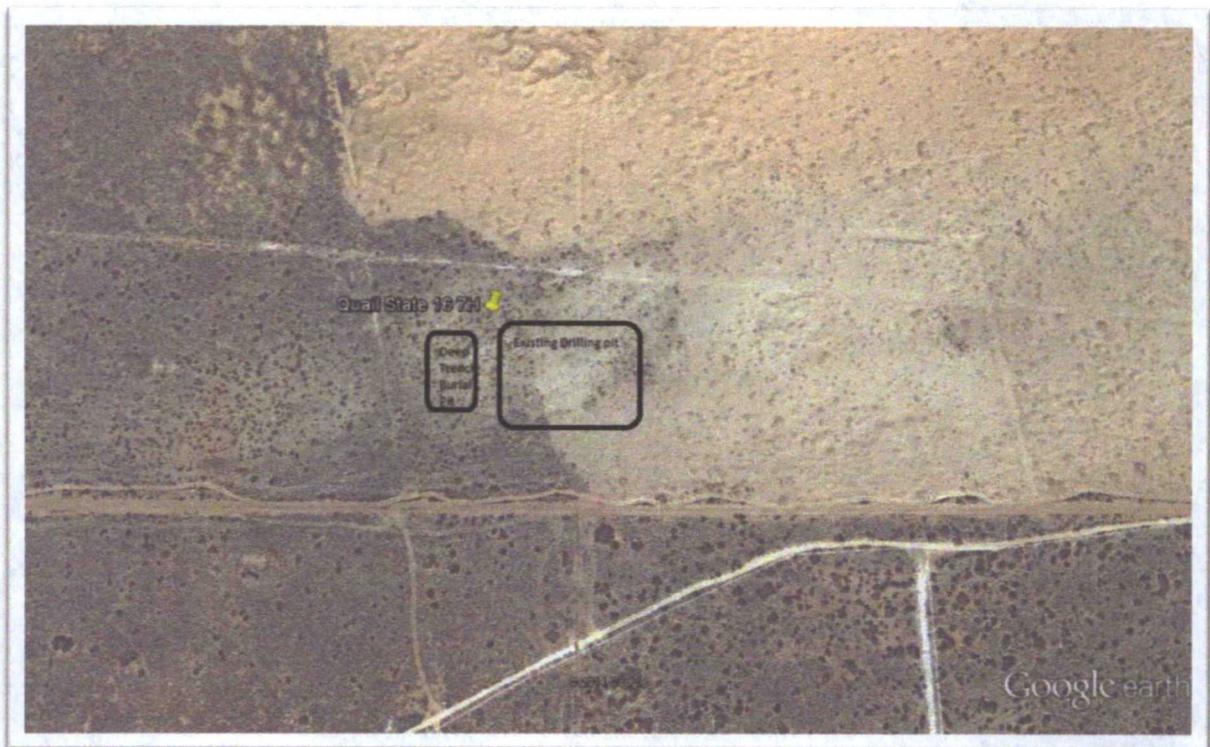
### Proof of Surface Owner Notice

- See attached letter

### Construction/Design Plan

A trench will be constructed as described below and in compliance with Subsection K of 19.15.17.11 NMAC

- An excavation will be dug out approximately 120' x 120' x 18'
- A geotextile underlayment will be installed if there is evidence of rocks, sharp edges, or irregularities that could rupture or tear the geomembrane.
- The trench will be lined with a 20-mil string reinforced LLDPE liner.
- Prior to field seaming, we will overlap the liners four to six inches. A qualified operator or a technician under his direct supervision will perform the field welding and testing.
- The liner seams will be oriented up and down and parallel to the line of maximum slope.
- There will be sufficient liner installed to reduce the stress-strain on the liner and the outer edges will be secured for the deposit of the excavated waste material into the trench



### Protocols and Procedures

The procedure for the deep burial of the pit are based on the appropriate requirements set forth in 19.15.17.13 NMAC. They are outlined below;

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## Pit Closure

Tracking # 10182  
Project Quail State 16 7H deep trench burial

- Ensure that all free liquids have been removed prior to commencing the pit closure.
- All pit contents will be removed and placed into a division approved facility (deep trench burial), if needed the contents will be stabilized/solidified with earthen material and zeolite in a ratio not to exceed 3:1 (3 parts earthen material/zeolite to 1 part pit contents).
- Prior to burial, the waste mixture must pass the paint filter liquids test (EPA SW-846, Method 9095 or other test methods approved by the division.
- A 5 point composite sample of the pit contents will be collected to ensure that the parameters listed in Table II of 19.15.17.13 NMAC are met

Closure criteria for this Burial Trench (based on depth to ground water which is >100 feet)	
Constituent	Limit
Chloride	80,000 mg/kg
TPH	2,500 mg/kg
GRO + DRO	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 kg/kg
If the analytical results are higher than concentrations shown above, then closure will proceed in accordance with Subsection C of 19.15.17.13 NMAC (Dig and Haul)	

- A 5 point composite sample will be collected beneath the pit to ensure that the parameters listed in Table I of 19.15.17.13 NMAC are met

Closure criteria for soils beneath pits where the contents have been removed (based on depth to ground water which is >100 feet)	
Constituent	Limit
Chloride	20,000 mg/kg
TPH	2,500 mg/kg
GRO + DRO	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 kg/kg
If the analytical results are higher than concentrations shown above, then closure will halt until approval has been given by the division to continue	

## Confirmation and Soil Sampling Plan

Sample ID	Depth	Analytical
BH 1	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 2	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 3	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 4	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
BH 5	6"	Chlorides, TPH, BTEX, GRO + DRO, Benzene
Background	Surface	Chlorides, TPH, BTEX, GRO + DRO, Benzene

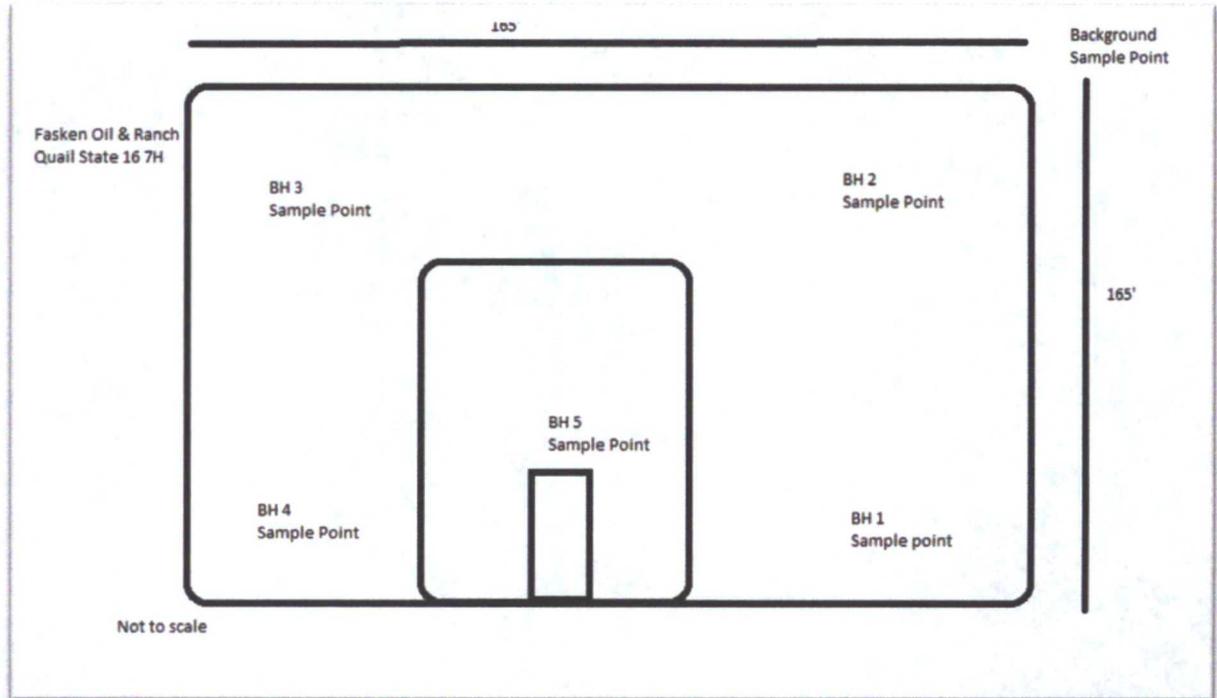
## One Source Environmental

9205 WCR 127  
Midland, TX 79706  
Office (432) 561-8804  
Cell (432) 202-3096

## Pit Closure

Tracking # 10182  
Project Quail State 16 7H deep trench burial

Waste Materials	Entire thickness	Chlorides, TPH, BTEX, GRO + DRO, Benzene
-----------------	------------------	--



### Waste Material Sampling Plan

Prior to closure, a five-point (minimum) random composite sample of the residual solids in the pit will be tested in a laboratory to demonstrate

- That the stabilized material will not exceed the contaminant concentrations listed in Table II of 19.15.17.13 NMAC mixed in a ratio of 3:1 with the earth material to be used for mixing and stabilization of the residual cuttings and mud.
- The waste mixture will pass the paint filter liquids test (EPA SW-846, Method 9095 or other test methods approved by the division).

### Soil Cover and Design of Pit Location and Trench

Upon achieving all applicable waste stabilization and transfer of stabilized wastes to the burial trench;

- We will fold the outer edges of the trench liner to overlap the waste material into the trench prior to the installation of the geomembrane cover;
- Install a geomembrane cover over the waste material in the lined trench, we will install the geomembrane cover in a manner that prevents the collection of infiltration waste into the lined trench or temporary pit and onto the geomembrane cover after the soil cover is in place, the geomembrane cover shall consist of a 20-mil string reinforced LLDPE liner or equivalent cover the appropriate division district office approves, the geomembrane cover shall be composed of

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## Pit Closure

Tracking # 10182  
Project Quail State 16 7H deep trench burial

an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions; cover compatibility shall comply with EPA SW-846 Method 9090A

- At least 3-feet of compacted, uncontaminated, non-waste containing earthen fill with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0 will be placed over the pit and the deep trench burial pit. The soil cover will include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater, over the 3-foot earth material. The site will be recontoured to blend with the surrounding topography and to prevent erosion of the cover and ponding over the cover.

### Site Reclamation and Re-vegetation Plan

Top soils and sub soils will be replaced to their original relative positions and contoured so as to achieve erosion control, long term stability and preservation of surface water flow patterns. Reseeding will commence on the first favorable growing season following closure.

The operator will notify the division when the surface grading work element of reclamation is complete.

The operator will notify the division when the site meets the surface owner's requirements or exhibits a uniform vegetative cover that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

The operator will notify the division when the reclamation and re-vegetation are complete.

### Closure Report

Within 60 days of closure completion, we will submit a

- Closure report on form C-144, with all necessary attachments
- A certification that all information in the report and attachments are correct, that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan
- A plat of the pit location on form C-105 and a separate C-105 showing the exact location of the trench.
- We will place at the center of an onsite burial trench a steel marker that is not less than four inches in diameter. It will be placed at the bottom of a three-foot deep hole (minimum) that is filled with cement to secure the marker at least four feet above mean ground level which permanently displays the operator name, lease name, well number, unit letter, section, township and range in welded or stamped legible letters/numbers

### Timing of Closure

"The operator will close the temporary pit within 6 months from the date the drilling or workover rig was released from the site. This date will be noted on form C-105 or C-103 filed with the division upon the well's or workover's completion".

State of New Mexico  
Energy, Minerals and Natural Resources Department

HOBBS OCD  
DEC 13 2012



Susana Martinez  
Governor

John Bemis  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Jami Bailey  
Division Director  
Oil Conservation Division

BUREAU OF LAND MANAGEMENT  
ATTN: Jim Rutley  
P O Box 1778  
Carlsbad, NM 88221

State Land Office  
ATTN: Joe Mraz  
P O Box 1148  
Santa Fe, NM 87504

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR Fasken Oil & Ranch Ltd

LEASE NAME Quail 16 State Com #7H

PROPOSED LOCATION Sect 16 20S-34E Unit P 200 FSL 225 FEL

PROPOSED DEPTH 10945

Gentlemen:

The application for permit to drill identified above has been filed with this office of the new Mexico Oil Conservation Division. Pursuant to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether the location is within an established Life-or-Mine Reserve are filed with an approved by your office. If not, please advise whether it is within the buffer zone established by the order.

Thank you for your assistance. Please return as soon as possible.

Very truly yours,

OIL CONSERVATION DIVISION

EL Gonzales  
Supervisor, District I

Response:

The above reference location is in the LMR (2012 year) \_\_\_\_\_ Yes \_\_\_ NO

The above reference location is within the Buffer Zone \_\_\_\_\_ Yes \_\_\_ No

Signed \_\_\_\_\_ Date 12-14-2012

Printed Signature JAMES S. TULLY

Representing BLM - CFO

Oil Conservation Division  
1625 N French Drive, Hobbs New Mexico 88240  
Phone (575) 393-6161 • Fax (575) 393-0720 • www.emnrd.state.nm.us

FEB 04 2013

State of New Mexico  
Energy, Minerals and Natural Resources Department

HOBBS OCD

JAN 29 2013

Susana Martinez  
Governor

John Bemis  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Jami Bailey  
Division Director  
Oil Conservation Division



BUREAU OF LAND MANAGEMENT  
ATTN: Jim Rutley  
P O Box 1778  
Carlsbad, NM 88221

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Thank you for your assistance. Please return as soon as possible.

Very truly yours,

OIL CONSERVATION DIVISION

EL Gonzales  
Supervisor, District I

Response:

The above reference location is in the LMR (2011 year)-----Yes \_\_\_ NO X

The above reference location is within the Buffer Zone -----Yes \_\_\_ No X

Signed Larry J Rybal Date 29 Jan 13

Printed Signature Larry J Rybal

Representing State Land Office

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone (575) 393-6161 Fax: (575) 393-0720

MAR 20 2013

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 1, 2011

DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone (575) 746-1263 Fax: (575) 746-9720

Submit one copy to appropriate  
District Office

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 334-6178 Fax: (505) 334-6170

**RECEIVED CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax: (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-40942	Pool Code 37570	Pool Name Lea; Bone Spring
Property Code 36547	Property Name QUAIL STATE 16	Well Number 7H
OGRID No. 151416	Operator Name FASKEN OIL AND RANCH, LTD	Elevation 3642'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	16	20 S	34 E		200	SOUTH	225	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	16	20 S	34 E		330	NORTH	330	EAST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N. 575725.09 E. 775270.58	N. 575729.96 E. 777924.30	<p><b>PROPOSED BOTTOM HOLE LOCATION</b> Lot - N 32°34'46.06" Long - W 103°33'27.84" NMSPC - N 575409.767 E 780242.913 (NAD-83)</p>	N. 575741.08 E. 780570.43	<p>330 330 4749.7 200</p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.   <u>Kim Tyson</u> 3-19-2013                      Signature Date                      Printed Name                      kimt@forl.com                      Email Address</p>
N. 573083.39 E. 775289.82					
N. 570444.19 E. 775311.17	N. 570458.31 E. 777959.66	<p><b>SURFACE LOCATION</b> Lot - N 32°33'59.08" Long - W 103°33'26.61" NMSPC - N 570662.081 E 780382.620 (NAD-83)</p>	N. 570462.45 E. 780609.09	<p>Penetration Point</p>	<p>Certificate No. Gary L. Jones 7977 BASIN SURVEYS 27457</p>

Penetration Point 11,175' MD, 10,942' TVD; 597' FSL & 330' FEL

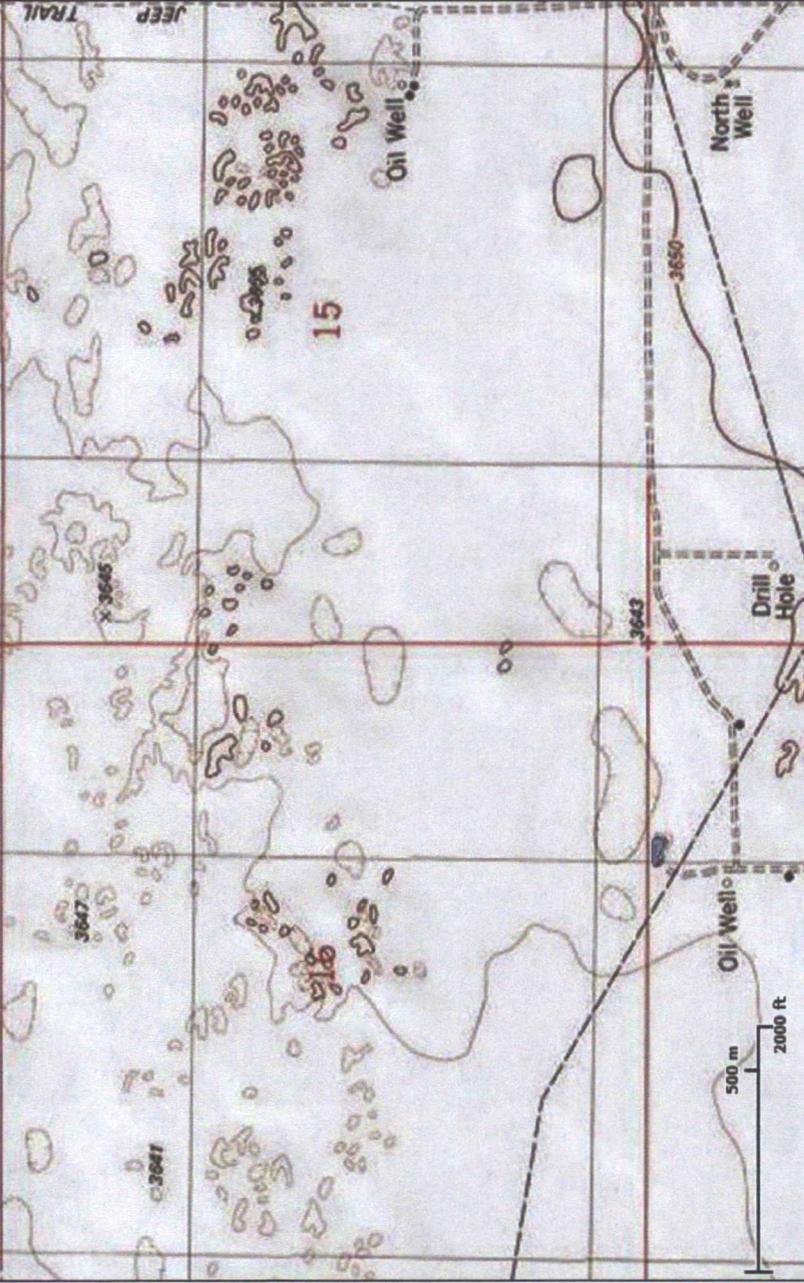


U.S. Fish and Wildlife Service

# National Wetlands Inventory

Quail State 16 #7H

Apr 5, 2014



## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

### User Remarks:

Topographic map showing nearest watercourse which is greater than 500' from site.



U.S. Fish and Wildlife Service

# National Wetlands Inventory

Quail State 16 #7H

Apr 5, 2014

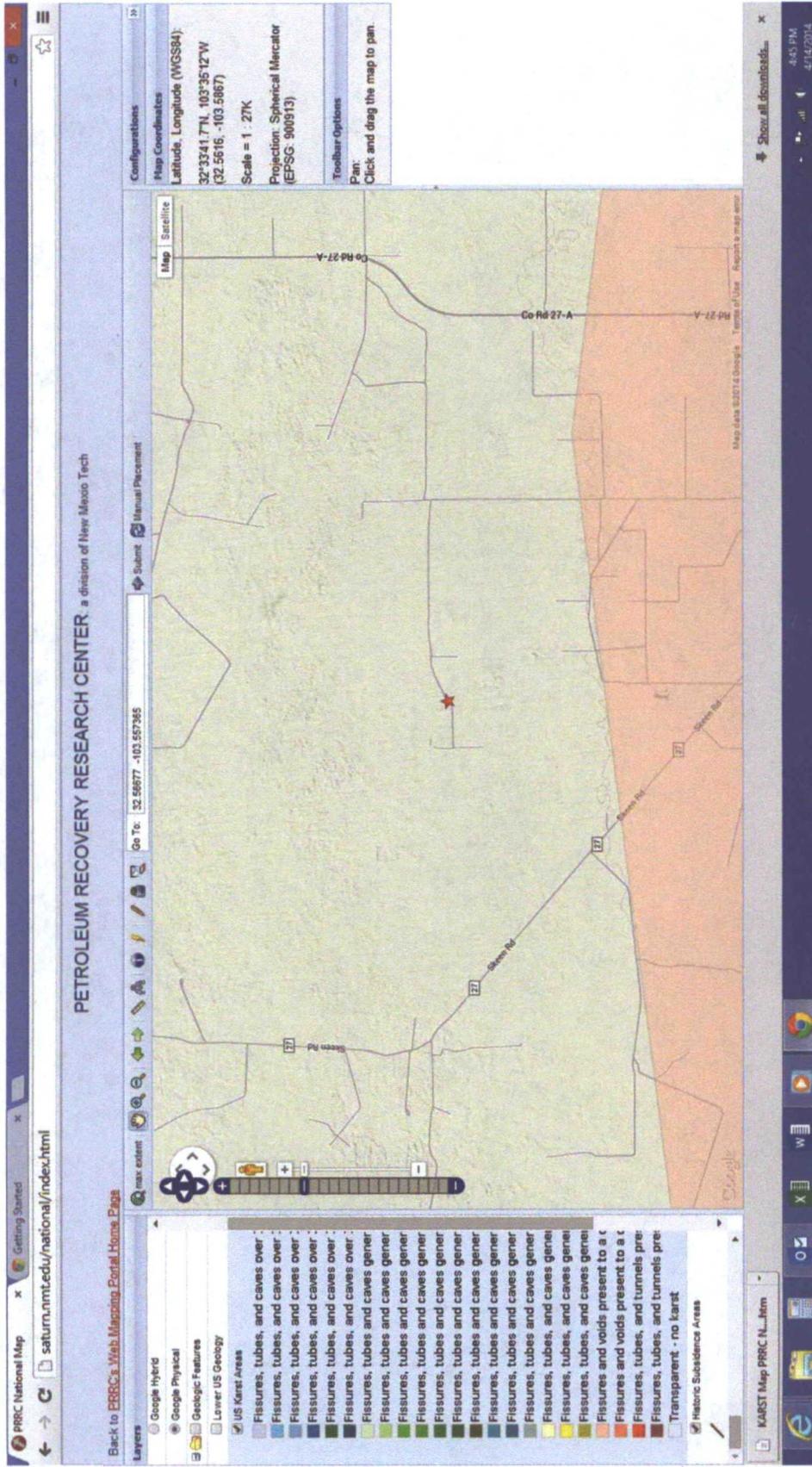


This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

### User Remarks:

Wetlands map showing the nearest watercourse which is greater than 500' from site.

KARST Potential Map at the Quail State 16 #7H for deep trench burial of pit contents by One Source Environmental



4/14