

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

3121

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

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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.

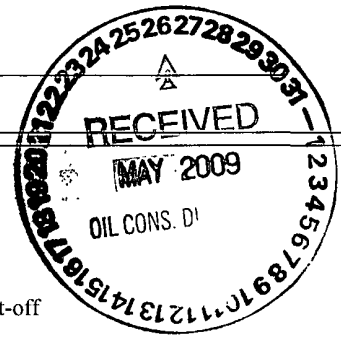
1.
Operator: Huntington Energy, L.L.C. OGRID #: 208706
Address: 908 N.W. 71st St., Oklahoma City, OK 73116
Facility or well name: Canyon Largo Unit #489
API Number: 30-039-30039 OCD Permit Number: _____
U/L or Qtr/Qtr G Section 18 Township 25N Range 6W County: Rio Arriba Co., NM
Center of Proposed Design: Latitude 36.400031°N Longitude 107.50575° W NAD: ☒ 1927 ☐ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: 7000 bbl Dimensions: L 140' x W 65' x D 10'

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **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 _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.



6.

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 _____

7.

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)

8.

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 19.15.3.103 NMAC

9.

Administrative Approvals 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:

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

10.

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

| | |
|--|---|
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input 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 type="checkbox"/> No |
| Within 500 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 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 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 type="checkbox"/> No |
| Within a 100-year floodplain. - FEMA map | <input type="checkbox"/> Yes <input type="checkbox"/> No |

11.

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: _____

12.

Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

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 H₂S, 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

14.

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 ☐ Closed-loop System

☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____
 Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ 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 I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---|---|
| Ground water is less than 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 type="checkbox"/> No <input type="checkbox"/> NA |
| Ground water is between 50 and 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 type="checkbox"/> Yes <input 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 type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA |
| 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 | <input type="checkbox"/> Yes <input 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 type="checkbox"/> No |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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 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 type="checkbox"/> No |
| Within 500 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 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 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 type="checkbox"/> No |
| Within a 100-year floodplain. - FEMA map | <input type="checkbox"/> Yes <input type="checkbox"/> No |

18.

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 F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.

OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Jonathan D. Kelly Approval Date: 12/19/2011

Title: Compliance Officer OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: 5/1/09

22.

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.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

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)
☒ 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 36.40027 N Longitude 107.50582 NAD: ☐ 1927 ☒ 1983

25.

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): Catherine Smith Title: Regulatory

Signature: Catherine Smith Date: 5/15/09

e-mail address: csmith@huntingtonenergy.com Telephone: 405-840-9876

Cathy Smith

From: Cathy Smith
Sent: Friday, May 15, 2009 2:52 PM
To: 'brandon.powell@state.nm.us'
Cc: Alan McNally
Subject: CLU 489

Brandon,

Notice of Pit Closure for the Canyon Largo Unit #489, May 1, 2009.

CLU 489
API#: 30-039-30039
Lease #: NMSF 078882
SWNE Sec 18, T25N-R6W
Rio Arriba Co., NM

Cathy Smith
(405) 840-9876 ext. 129
(405) 840-2011 Fax

✕

5/15/2009



**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

| | | | |
|----------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49185 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-06-09 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

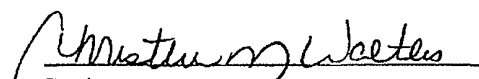
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 31.3 | 0.2 |
| Diesel Range (C10 - C28) | 126 | 0.1 |
| Total Petroleum Hydrocarbons | 157 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Canyon Largo Unit #489.**


Analyst


Review



**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

| | | | |
|----------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49186 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-06-09 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

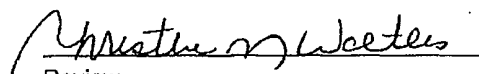
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 58.2 | 0.2 |
| Diesel Range (C10 - C28) | 157 | 0.1 |
| Total Petroleum Hydrocarbons | 185 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Canyon Largo Unit #489.**


Analyst


Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

| | | | |
|----------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49187 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Soil | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-06-09 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

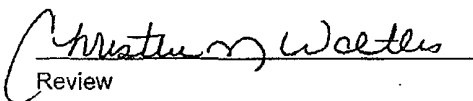
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 125 | 0.2 |
| Diesel Range (C10 - C28) | 262 | 0.1 |
| Total Petroleum Hydrocarbons | 387 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.


Analyst


Review



**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

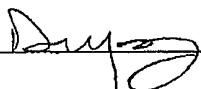
| | | | |
|----------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49188 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-06-09 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

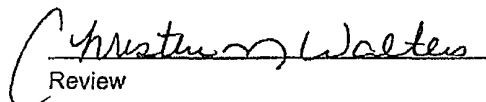
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 25.4 | 0.2 |
| Diesel Range (C10 - C28) | 51.3 | 0.1 |
| Total Petroleum Hydrocarbons | 76.7 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Canyon Largo Unit #489.**

Analyst 

Review 



**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

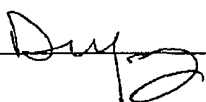
| | | | |
|----------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | Middle | Date Reported: | 03-10-09 |
| Laboratory Number: | 49189 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-06-09 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

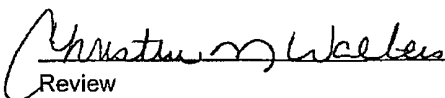
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 57.1 | 0.2 |
| Diesel Range (C10 - C28) | 157 | 0.1 |
| Total Petroleum Hydrocarbons | 214 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Canyon Largo Unit #489.**


Analyst


Review



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

| | | | |
|--------------------|--------------------|---------------------|----------|
| Client: | QA/QC | Project #: | N/A |
| Sample ID: | 03-06-09 QA/QC | Date Reported: | 03-10-09 |
| Laboratory Number: | 49136 | Date Sampled: | N/A |
| Sample Matrix: | Methylene Chloride | Date Received: | N/A |
| Preservative: | N/A | Date Analyzed: | 03-06-09 |
| Condition: | N/A | Analysis Requested: | TPH |

| | I-Cal Date | I-Cal RF | C-Cal RF | % Difference | Accept Range |
|-------------------------|------------|-------------|-------------|--------------|--------------|
| Gasoline Range C5 - C10 | 05-07-07 | 1.0394E+003 | 1.0398E+003 | 0.04% | 0 - 15% |
| Diesel Range C10 - C28 | 05-07-07 | 1.0439E+003 | 1.0443E+003 | 0.04% | 0 - 15% |

| Blank Conc. (mg/L - mg/Kg) | Concentration | Detection Limit |
|------------------------------|---------------|-----------------|
| Gasoline Range C5 - C10 | ND | 0.2 |
| Diesel Range C10 - C28 | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

| Duplicate Conc. (mg/Kg) | Sample | Duplicate | % Difference | Accept Range |
|-------------------------|--------|-----------|--------------|--------------|
| Gasoline Range C5 - C10 | ND | ND | 0.0% | 0 - 30% |
| Diesel Range C10 - C28 | ND | ND | 0.0% | 0 - 30% |

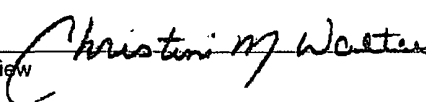
| Spike Conc. (mg/Kg) | Sample | Spike Added | Spike Result | % Recovery | Accept Range |
|-------------------------|--------|-------------|--------------|------------|--------------|
| Gasoline Range C5 - C10 | ND | 250 | 248 | 99.2% | 75 - 125% |
| Diesel Range C10 - C28 | ND | 250 | 250 | 100% | 75 - 125% |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 49136 - 49139 and 49185 - 49190.

Analyst 

Review 



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49185 | Date Sampled: | 03-04-09 |
| Chain of Custody: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Analyzed: | 03-06-09 |
| Preservative: | Cool | Date Extracted: | 03-05-09 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 3.5 | 0.9 |
| Toluene | 17.2 | 1.0 |
| Ethylbenzene | 12.8 | 1.0 |
| p,m-Xylene | 55.8 | 1.2 |
| o-Xylene | 35.1 | 0.9 |
| Total BTEX | 124 | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 99.0 % |
| | 1,4-difluorobenzene | 99.0 % |
| | Bromochlorobenzene | 99.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49186 | Date Sampled: | 03-04-09 |
| Chain of Custody: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Analyzed: | 03-06-09 |
| Preservative: | Cool | Date Extracted: | 03-05-09 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 17.7 | 0.9 |
| Toluene | 96.7 | 1.0 |
| Ethylbenzene | 35.2 | 1.0 |
| p,m-Xylene | 191 | 1.2 |
| o-Xylene | 117 | 0.9 |
| Total BTEX | 458 | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 97.0 % |
| | 1,4-difluorobenzene | 97.0 % |
| | Bromochlorobenzene | 97.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49187 | Date Sampled: | 03-04-09 |
| Chain of Custody: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Soil | Date Analyzed: | 03-06-09 |
| Preservative: | Cool | Date Extracted: | 03-05-09 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 13.4 | 0.9 |
| Toluene | 75.8 | 1.0 |
| Ethylbenzene | 35.4 | 1.0 |
| p,m-Xylene | 188 | 1.2 |
| o-Xylene | 201 | 0.9 |
| Total BTEX | 514 | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 98.0 % |
| | 1,4-difluorobenzene | 98.0 % |
| | Bromochlorobenzene | 98.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49188 | Date Sampled: | 03-04-09 |
| Chain of Custody: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Analyzed: | 03-06-09 |
| Preservative: | Cool | Date Extracted: | 03-05-09 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 9.6 | 0.9 |
| Toluene | 106 | 1.0 |
| Ethylbenzene | 67.0 | 1.0 |
| p,m-Xylene | 700 | 1.2 |
| o-Xylene | 444 | 0.9 |
| Total BTEX | 1,330 | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 96.0 % |
| | 1,4-difluorobenzene | 96.0 % |
| | Bromochlorobenzene | 96.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-------------------|---------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | Middle | Date Reported: | 03-10-09 |
| Laboratory Number: | 49189 | Date Sampled: | 03-04-09 |
| Chain of Custody: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Analyzed: | 03-06-09 |
| Preservative: | Cool | Date Extracted: | 03-05-09 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 3.5 | 0.9 |
| Toluene | 56.3 | 1.0 |
| Ethylbenzene | 31.0 | 1.0 |
| p,m-Xylene | 142 | 1.2 |
| o-Xylene | 97.5 | 0.9 |
| Total BTEX | 330 | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 99.0 % |
| | 1,4-difluorobenzene | 99.0 % |
| | Bromochlorobenzene | 99.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Canyon Largo Unit #489.

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|------------------|----------------|----------|
| Client: | N/A | Project #: | N/A |
| Sample ID: | 03-06-BTEX QA/QC | Date Reported: | 03-10-09 |
| Laboratory Number: | 49136 | Date Sampled: | N/A |
| Sample Matrix: | Soil | Date Received: | N/A |
| Preservative: | N/A | Date Analyzed: | 03-06-09 |
| Condition: | N/A | Analysis: | BTEX |

| Calibration and Detection Limits (ug/L) | I-Cal RF | C-Cal RF | %Diff | Blank Conc | Detect Limit |
|--|-------------|----------------------|-------|---------------|-----------------|
| | | Accept Range 0 - 15% | | | |
| Benzene | 1.5251E+005 | 1.5281E+005 | 0.2% | ND | 0.1 |
| Toluene | 1.3847E+005 | 1.3875E+005 | 0.2% | ND | 0.1 |
| Ethylbenzene | 1.2076E+005 | 1.2100E+005 | 0.2% | ND | 0.1 |
| p,m-Xylene | 3.1934E+005 | 3.1998E+005 | 0.2% | ND | 0.1 |
| o-Xylene | 1.3739E+005 | 1.3767E+005 | 0.2% | ND | 0.1 |

| Duplicate Conc. (ug/Kg) | Sample | Duplicate | %Diff | Accept Range | Detect Limit |
|-------------------------|--------|-----------|-------|--------------|--------------|
| Benzene | ND | ND | 0.0% | 0 - 30% | 0.9 |
| Toluene | ND | ND | 0.0% | 0 - 30% | 1.0 |
| Ethylbenzene | ND | ND | 0.0% | 0 - 30% | 1.0 |
| p,m-Xylene | ND | ND | 0.0% | 0 - 30% | 1.2 |
| o-Xylene | ND | ND | 0.0% | 0 - 30% | 0.9 |

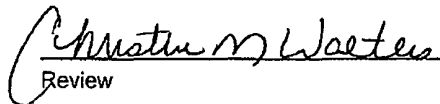
| Spike Conc. (ug/Kg) | Sample | Amount Spiked | Spiked Sample | %Recovery | Accept Range |
|---------------------|--------|---------------|---------------|-----------|--------------|
| Benzene | ND | 50.0 | 49.9 | 99.8% | 39 - 150 |
| Toluene | ND | 50.0 | 49.8 | 99.6% | 46 - 148 |
| Ethylbenzene | ND | 50.0 | 50.0 | 100% | 32 - 160 |
| p,m-Xylene | ND | 100 | 98.0 | 98.0% | 46 - 148 |
| o-Xylene | ND | 50.0 | 50.0 | 100% | 46 - 148 |

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 49136 - 49139 and 49185 - 49190

Analyst 

Review 



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

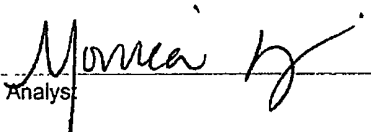
| | | | |
|----------------------|-------------------|------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49185 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

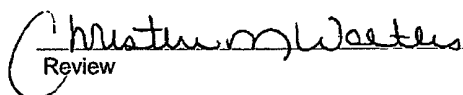
| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 402 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Canyon Largo Unit #489.

Analyst: 

Review: 



envirotech
Analytical Laboratory

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

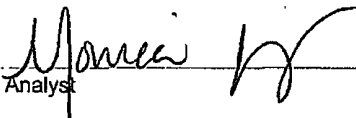
| | | | |
|----------------------|-------------------|------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SW Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49186 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

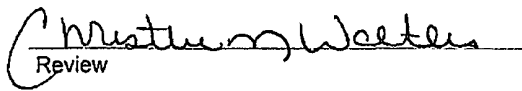
| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 198 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Canyon Largo Unit #489.


Analyst


Review

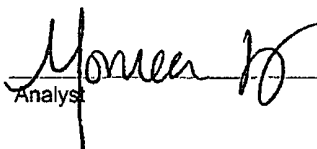
| | | | |
|----------------------|-------------------|------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49187 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Soil | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

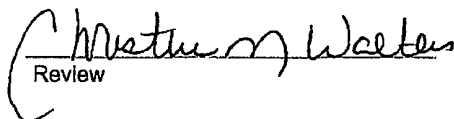
| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 348 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Canyon Largo Unit #489.


Analyst


Review



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

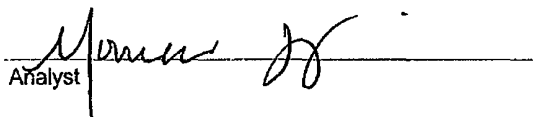
| | | | |
|----------------------|-------------------|------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NE Corner | Date Reported: | 03-10-09 |
| Laboratory Number: | 49188 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

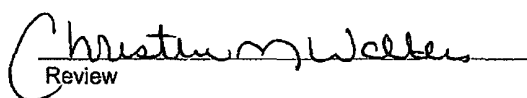
| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 456 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Canyon Largo Unit #489.

Analyst 

Review 



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

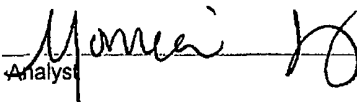
| | | | |
|----------------------|-------------------|------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | Middle | Date Reported: | 03-10-09 |
| Laboratory Number: | 49189 | Date Sampled: | 03-04-09 |
| Chain of Custody No: | 6447 | Date Received: | 03-04-09 |
| Sample Matrix: | Sludge | Date Extracted: | 03-05-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

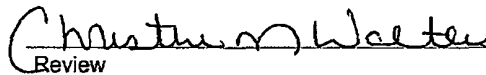
| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 552 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Canyon Largo Unit #489.


Analyst


Review



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT

| | | | |
|--------------------|-----------------------|------------------|----------|
| Client: | QA/QC | Project #: | N/A |
| Sample ID: | QA/QC | Date Reported: | 03-06-09 |
| Laboratory Number: | 03-05-TPH.QA/QC 49179 | Date Sampled: | N/A |
| Sample Matrix: | Freon-113 | Date Analyzed: | 03-05-09 |
| Preservative: | N/A | Date Extracted: | 03-05-09 |
| Condition: | N/A | Analysis Needed: | TPH |

| Calibration | I-Cal Date | C-Cal Date | I-Cal RF: | C-Cal RF: | % Difference | Accept. Range |
|-------------|------------|------------|-----------|-----------|--------------|---------------|
| | 02-13-09 | 03-05-09 | 1,500 | 1,610 | 7.3% | +/- 10% |

| Blank Conc. (mg/Kg) | Concentration | Detection Limit |
|---------------------|---------------|-----------------|
| TPH | ND | 12.0 |

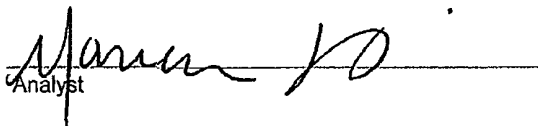
| Duplicate Conc. (mg/Kg) | Sample | Duplicate | % Difference | Accept. Range |
|-------------------------|--------|-----------|--------------|---------------|
| TPH | 54.0 | 49.2 | 8.9% | +/- 30% |

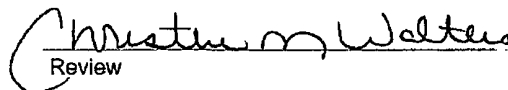
| Spike Conc. (mg/Kg) | Sample | Spike Added | Spike Result | % Recovery | Accept Range |
|---------------------|--------|-------------|--------------|------------|--------------|
| TPH | 54.0 | 2,000 | 1,680 | 81.8% | 80 - 120% |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 49179, 49184 - 49189, 49191, 49222, and 49223.


Analyst


Review



Chloride

| | | | |
|----------------|-------------------|-------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NW Corner | Date Reported: | 03-10-09 |
| Lab ID#: | 49185 | Date Sampled: | 03-04-09 |
| Sample Matrix: | Sludge | Date Received: | 03-04-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Chain of Custody: | 6447 |

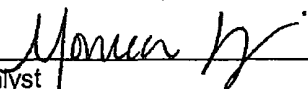
| Parameter | Concentration (mg/Kg) |
|-----------|-----------------------|
|-----------|-----------------------|

Total Chloride

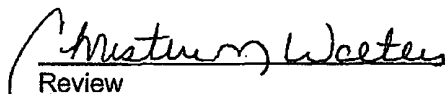
360

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Canyon Largo Unit #489.



Analyst



Review




Chloride

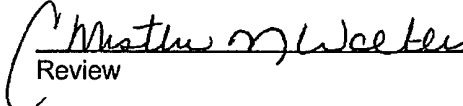
| | | | |
|----------------|-------------------|-------------------|------------|
| Client: | Huntington Energy | Project #: | 08111-0002 |
| Sample ID: | SW Corner | Date Reported: | 03-10-09 |
| Lab ID#: | 49186 | Date Sampled: | 03-04-09 |
| Sample Matrix: | Sludge | Date Received: | 03-04-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Chain of Custody: | 6447 |

| Parameter | Concentration (mg/Kg) |
|----------------|-----------------------|
| Total Chloride | 340 |

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Canyon Largo Unit #489.


Analyst


Review



Chloride

| | | | |
|----------------|-------------------|-------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | SE Corner | Date Reported: | 03-10-09 |
| Lab ID#: | 49187 | Date Sampled: | 03-04-09 |
| Sample Matrix: | Soil | Date Received: | 03-04-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Chain of Custody: | 6447 |

Parameter

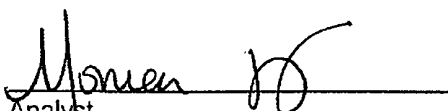
Concentration (mg/Kg)

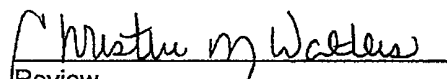
Total Chloride

100

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Canyon Largo Unit #489.


Analyst


Review



Chloride

| | | | |
|----------------|-------------------|-------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | NE Corner | Date Reported: | 03-10-09 |
| Lab ID#: | 49188 | Date Sampled: | 03-04-09 |
| Sample Matrix: | Sludge | Date Received: | 03-04-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Chain of Custody: | 6447 |

Parameter

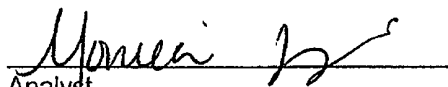
Concentration (mg/Kg)

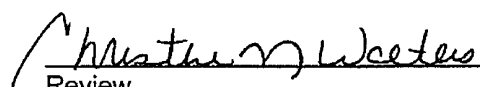
Total Chloride

440

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Canyon Largo Unit #489.


Analyst


Review



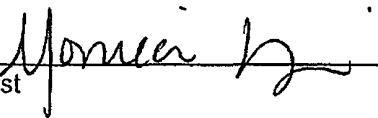
Chloride

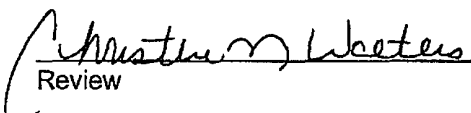
| | | | |
|----------------|-------------------|-------------------|------------|
| Client: | Huntington Energy | Project #: | 06111-0002 |
| Sample ID: | Middle | Date Reported: | 03-10-09 |
| Lab ID#: | 49189 | Date Sampled: | 03-04-09 |
| Sample Matrix: | Sludge | Date Received: | 03-04-09 |
| Preservative: | Cool | Date Analyzed: | 03-05-09 |
| Condition: | Intact | Chain of Custody: | 6447 |

| Parameter | Concentration (mg/Kg) |
|----------------|-----------------------|
| Total Chloride | 400 |

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Canyon Largo Unit #489.


Analyst


Review

CHAIN OF CUSTODY RECORD

6447

| Client: <i>Huntington Energy</i> | | | Project Name / Location: <i>CANYON Largo Unit #489</i> | | | ANALYSIS / PARAMETERS | | | | | | | | | | | | | | |
|--|-------------|-------------|---|--|----------------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|------------------|-------------------|---------------|-----|-------------------------------------|-------------------------------------|--|--|--|-------------------------------------|-------------------------------------|
| Client Address: | | | Sampler Name: <i>Eddie Rowe</i> <i>Rowe Petroleum Services</i> | | | TPH (Method 8015) | BTEX (Method 8021) | VOC (Method 8260) | RCRA 8 Metals | Cation / Anion | RCI | TCLP with H/P | PAH | TPH (418.1) | CHLORIDE | | | | Sample Cool | Sample Intact |
| Client Phone No.: <i>(505) 320-2533</i> | | | Client No.: <i>06111-0002</i> | | | | | | | | | | | | | | | | | |
| Sample No./ Identification | Sample Date | Sample Time | Lab No. | Sample Matrix | No./Volume of Containers | Preservative H ₂ O ₂ HCl HCE | | | | | | | | | | | | | | |
| <i>NW Corner</i> | <i>3/4</i> | <i>1321</i> | <i>49185</i> | Soil <i>Sludge</i> Solid <i>Aqueous</i> | <i>(1) 4</i> <i>0.2</i> | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>SW Corner</i> | <i>3/4</i> | <i>1319</i> | <i>49186</i> | Soil <i>Sludge</i> Solid <i>Aqueous</i> | <i>(1) 4</i> <i>0.2</i> | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>SE Corner</i> | <i>3/4</i> | <i>1320</i> | <i>49187</i> | Soil <i>Sludge</i> Solid <i>Aqueous</i> | <i>(1) 4</i> <i>0.2</i> | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>NE Corner</i> | <i>3/4</i> | <i>1317</i> | <i>49188</i> | Soil <i>Sludge</i> Solid <i>Aqueous</i> | <i>(1) 4</i> <i>0.2</i> | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>Middle</i> | <i>3/4</i> | <i>1318</i> | <i>49189</i> | Soil <i>Sludge</i> Solid <i>Aqueous</i> | <i>(1) 4</i> <i>0.2</i> | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | Soil Sludge | | | | | | | | | | | | | | | | |
| | | | | Solid Aqueous | | | | | | | | | | | | | | | | |
| | | | | Soil Sludge | | | | | | | | | | | | | | | | |
| | | | | Solid Aqueous | | | | | | | | | | | | | | | | |
| | | | | Soil Sludge | | | | | | | | | | | | | | | | |
| | | | | Solid Aqueous | | | | | | | | | | | | | | | | |
| | | | | Soil Sludge | | | | | | | | | | | | | | | | |
| | | | | Solid Aqueous | | | | | | | | | | | | | | | | |
| Relinquished by: (Signature) <i>Eddie Rowe</i> | | | | Date: <i>3/4</i> | Time: <i>1624</i> | Received by: (Signature) <i>[Signature]</i> | | | | Date: <i>3/4</i> | Time: <i>1624</i> | | | | | | | | | |
| Relinquished by: (Signature) | | | | | | Received by: (Signature) | | | | | | | | | | | | | | |
| Relinquished by: (Signature) | | | | | | Received by: (Signature) | | | | | | | | | | | | | | |

ENVIROTECH INC.
 5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505-632-0615

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB NO 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Bureau of Land Management
Farmington Field OfficeLease Serial No
NMSF 078882

| | | |
|--|--|---|
| 1a Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other | | 6 If Indian, Allottee or Tribe Name |
| b Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff Resvr, Other _____ | | 7 Unit or CA Agreement Name and No Canyon Largo Unit Report to lease |
| 2 Name of Operator Huntington Energy, L.L.C. | | 8 Lease Name and Well No Canyon Largo Unit #489 |
| 3 Address 908 N W 71st St Oklahoma City, OK 73116 | | 9 AFI Well No 30-039-30039 - 0051 |
| 4 Location of Well (Report location clearly and in accordance with Federal requirements)* Lot G, 2280' FNL & 1920' FEL At surface Sec 18-25N-6W | | 10 Field and Pool or Exploratory Basin Dakota |
| At top prod interval reported below Lot O, 500' FSL & 1980' FEL, Sec 18-25N-6W | | 11 Sec, T, R, M, on Block and Survey or Area Sec 18-25N-6W |
| 14 Date Spudded 01/13/2009 | | 12 County or Parish Rio Arriba |
| 15 Date T D Reached 01/29/2009 | | 13 State NM |
| 16 Date Completed 03/11/2009 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. | | 17 Elevations (DF, RKB, RT, GL)* 6725' GR |
| 18 Total Depth MD 7945' TVD | | 20 Depth Bridge Plug Set MD TVD |
| 19 Plug Back T D MD 7914' TVD | | 22 Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy) |
| 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) RST/CBL/GR/CCL | | |

23. Casing and Liner Record (Report all strings set in well)

| Hole Size | Size/Grade | Wt (#/ft) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No of Sks & Type of Cement | Slurry Vol (BBL) | Cement Top* | Amount Pulled |
|-----------|-------------|-----------|----------|-------------|-------------------------|-------------------------------|---------------------|-------------|---------------|
| 12 1/4" | 9 5/8" J-55 | 36# | Surface | 341' KB | | 275 sx | 58 bbls | Cir | 20 bbls |
| 7 7/8" | 4 1/2" N-80 | 11.6# | Surface | 7933' | Lead | 975 sx | 335 bbls | | |
| | | | | | Tail | 600 sx | 153 bbls | Cir | 3 bbls |

24. Tubing Record

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
|------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|

25. Producing Intervals

| Formation | Top | Bottom | Perforated Interval | Size | No Holes | Perf Status |
|-----------|-------|--------|---------------------|-------|----------|-------------|
| A) Dakota | 7514' | 7831' | 7721'-7732' | 0.41" | 44 | Active |
| B) | | | | | | |
| C) | | | | | | |
| D) | | | | | | |

27. Acid, Fracture, Treatment, Cement Squeeze, etc

| Depth Interval | Amount and Type of Material |
|----------------|---|
| 7721'-7732' | 22,816 GALS WAS 17 CP 70 Q DELTA 200 FRAC FLUID CONTAINING 35100# OF 20/40 CRC SAND |
| 7721'-7732' | ACIDIZED W/588 GALS 15% HCL. |

28. Production - Interval A

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|------------------------|
| | 3/11/09 | 8 | → | 0 | 500 | 32 | | | Flowing through casing |
| Choke Size | Tbg Press Flwg SI | Csg Press. | 24 Hr Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |
| 32/64 | 0 | 80 | → | 0 | 1000 | 60 | | Producing | |

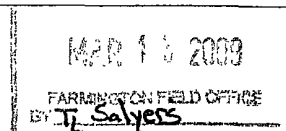
28a. Production - Interval B

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| | | | → | | | | | | |
| Choke Size | Tbg Press Flwg SI | Csg Press. | 24 Hr Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |
| | | | → | | | | | | |

*(See instructions and spaces for additional data on page 2)

ACCEPTED FOR RECORD

OPERATOR



28b Production - Interval C

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|-------------------|
| | | | → | | | | | | |
| Choke Size | Tbg. Press Flwg SI | Csg Press | 24 Hr Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |
| | | | → | | | | | | |

28c Production - Interval D

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|-------------------|
| | | | → | | | | | | |
| Choke Size | Tbg. Press Flwg SI | Csg Press | 24 Hr Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |
| | | | → | | | | | | |

29 Disposition of Gas (Solid, used for fuel, vented, etc)
To be Sold

30 Summary of Porous Zones (Include Aquifers)

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

| Formation | Top | Bottom | Descriptions, Contents, etc | Name | Top |
|-----------|-------|--------|-----------------------------|----------------|------------|
| | | | | | Meas Depth |
| Dakota | 7514' | 7831' | Sand & Shale, gas bearing | Picture Cliffs | 3195' |
| | | | | Chacra | 4046' |
| | | | | Mesaverde | 4745' |
| | | | | Menefee | 4838' |
| | | | | Point Lookout | 5473' |
| | | | | Mancos | 5684' |
| | | | | Greenhorn | 7405' |
| | | | | Graneros | 7472' |
| | | | | Dakota | 7514' |
| | | | | Morrison | 7831' |

32 Additional remarks (include plugging procedure)

**Will set tubing within 90 days. A Sundry will be filed at that time. ✓

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Catherine Smith
Signature Catherine Smith

Title Land Associate
Date 03/11/2009

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.

(Continued on page 3)

(Form 3160-4, page 2)

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
1301 W Grand Avenue, Artesian, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87504-2088

Form C-102

Revised October 12, 2005

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|--|--|
| ¹ API Number 30-039-30039 | ² Pool Code 71599 | ³ Pool Name Basin Dakota |
| ⁴ Property Code 32660 | ⁵ Property Name CANYON LARGO UNIT | ⁶ Well Number 489 |
| ⁷ OGUID No. 208706 | ⁸ Operator Name HUNTINGTON ENERGY, LLC | ⁹ Elevation 6725' |

¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| G | 18 | 25-N | 6-W | | 2280 | NORTH | 1920 | EAST | RIO ARriba |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| C | 18 | 25-N | 6-W | | 660 | SOUTH | 1980 | EAST | RIO ARriba |

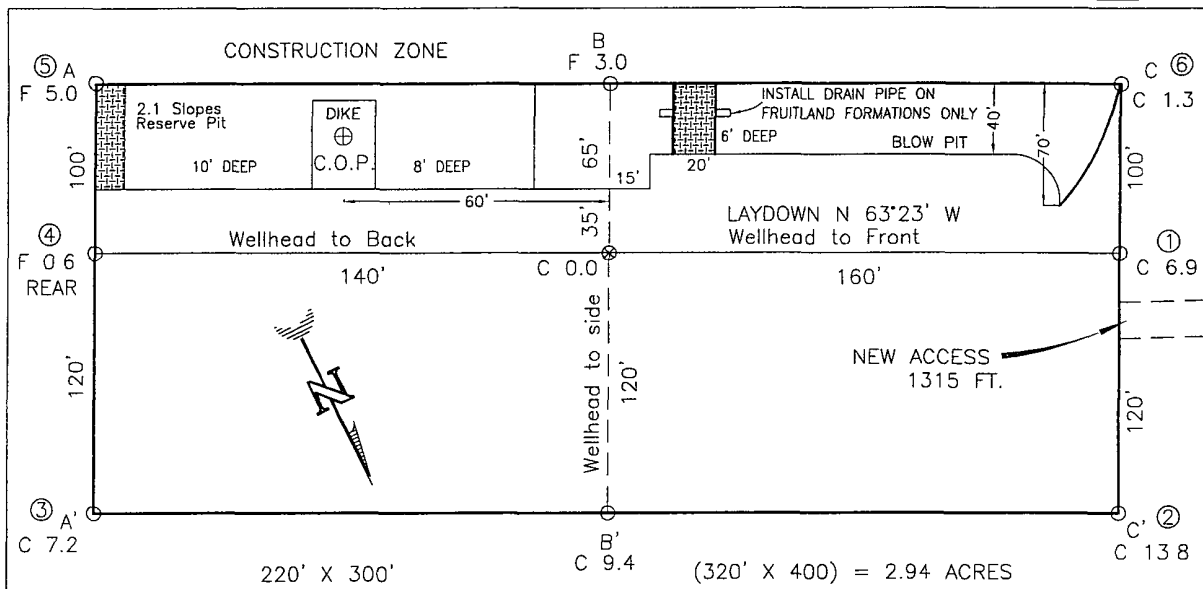
| | | | |
|--|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres E/2 - 320 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|--|-------------------------------|----------------------------------|-------------------------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | | | |
|-------|--------------------------|----------------------------|--------------------------|---|
| 16 | FD 3 1/4" B.L.M. BC 1965 | S 89°42'03" W 2649.51' (M) | FD 3 1/4" B.L.M. BC 1965 | 17 |
| LOT 1 | | | | OPERATOR CERTIFICATION |
| | | | | 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. |
| | | | | <i>Catherine Smith</i> 3/10/09 Signature Date Catherine Smith Printed Name |
| LOT 2 | | | | 18 |
| | | | | SURFACE: LAT: 36.40027° N (NAD 83) LONG: 107.50582° W (NAD 83) LAT: 36°24'00.98" N (NAD 27) LONG: 107°30'20.98" W (NAD 27) |
| LOT 3 | | | | 18 |
| | | | | BOTTOM HOLE LAT: 36.39411° N (NAD 83) LONG: 107.50597° W (NAD 83) LAT: 36°23'38.81" N (NAD 27) LONG: 107°30'21.51" W (NAD 27) |
| LOT 4 | | | | 18 |
| | | | | SURVEYOR CERTIFICATION |
| | | | | I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. |
| | | | | OCTOBER 25, 2006 Date of Survey Signature and Seal of Professional Surveyor 11-11-08 REGISTERED PROFESSIONAL LAND SURVEYOR 8694 Certificate Number |
| | | | | |

HUNTINGTON ENERGY LLC
 CANYON LARGO UNIT NO. 489, 2280 FNL 1920 FEL
 SEC. 18, T-25-N, R-6-W, N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO
 GROUND ELEVATION: 6725, DATE: OCTOBER 25, 2006

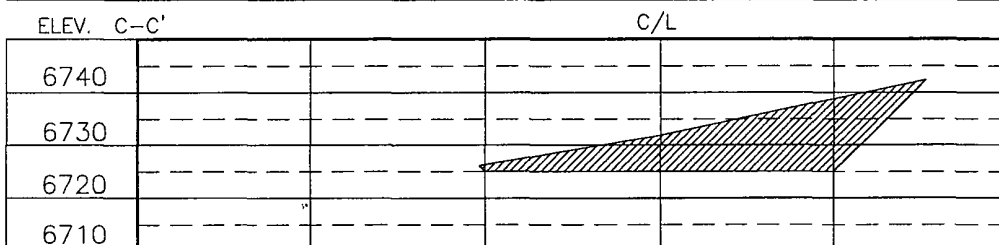
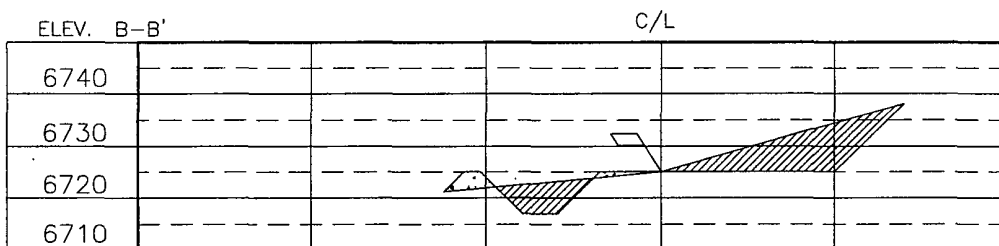
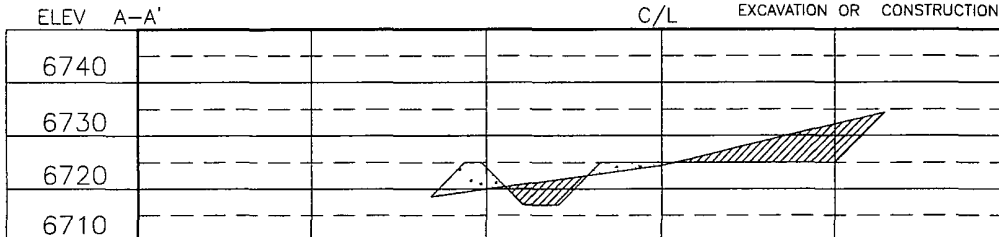
CENTER OF PIT
 NAD 83
 LAT. = 36.400031° N
 LONG. = 107.50575° W
 NAD 27
 LAT. = 36°24'00.07237" N
 LONG. = 107°30'18.51608" W



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE)
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT

NOTE:

DAGGETT ENTERPRISES, INC IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLESON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

| | | | |
|-----------------------------|----------|-------------|----------|
| REVISION | DATE | REVISION BY | DATE |
| ADDED C.O.P. | 12/17/08 | G.V. | 12/17/08 |
| LOC. RESTAKE'D/L.S. NO. CHG | 12/07/08 | G.V. | 12/07/08 |

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 510 • Farmington, NM 87499
 Phone (505) 326-1772 • Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894

DRAWN BY: A.G.
 ROW#: HTG059
 DATE: 4/20/06

Huntington Energy, L.L.C.
Canyon Largo Unit #489
Sec 18,, T25N-R6W
Rio Arriba Co., NM

Soil Backfilling and Cover Installation

Upon completion of solidification and testing standards being passed (see attached test results) a minimum of 4 ft of cover is achieved including a suitable layer of material to establish vegetation at the site. All re-contouring of location will match fit shape, line, and texture of the surrounding area.

Re-Vegetation and Seeding Technique

Seeding shall commence on or about April 1st, or the first available growing season barring weather. BLM stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover consisting of at least three native plant species, including at least one grass, and maintain that cover through two successive growing seasons. Repeated seeding or planting will be continued until successful growth occurs.

Temporary Pit Marker

A steel marker will be placed at the center of the on-site burial. The steel marker will not be less than 4" in diameter and be cemented in a 3' hole. Marker shall extend 4' above ground level. Engraved into the marker will be the operator's name, and legal location. This marker shall not be removed. Note: during active operations, a ground level marker will be employed due to safety concerns; upon abandonment, the 4" x 4' marker will be employed.

Disposal Facility

Facility Name: IEI
Permit #: NM-010010B

HUNTINGTON ENERGY L.L.C.

CLU #489

2280' FNL 1920' FEL

SEC. 18 T25N R06W

API. #30-039-30039

LATITUDE: $36^{\circ} .40027' N$ (NAD 83)

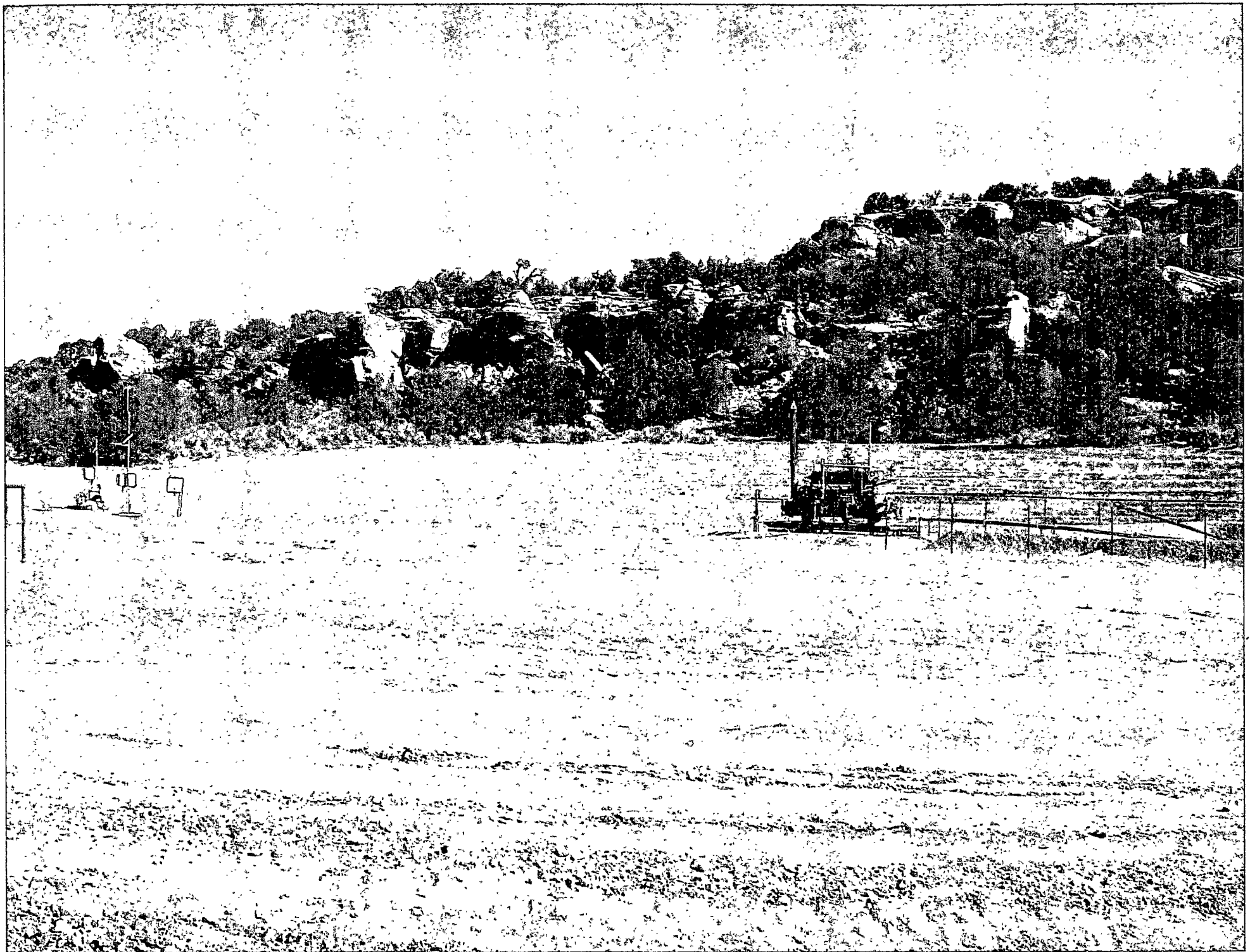
LONGITUDE: $107^{\circ} .50582' W$

RIO ARriba COUNTY, NEW MEXICO

CLU #489



CLU #489



CUU #489



CLU #489

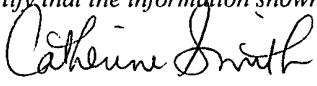


CLU#489



CLU #489



| | | | | | | | |
|---|-----------------------|---|------------------------|--|---|---|--|
| Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 | | State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 | | | Form C-105 July 17, 2008 | | |
| | | 1. WELL API NO. 30-039-30039 | | | | | |
| | | 2. Type of Lease <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN | | | | | |
| | | 3. State Oil & Gas Lease No. | | | | | |
| WELL COMPLETION OR RECOMPLETION REPORT AND LOG | | | | | | | |
| 4. Reason for filing: <input type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <input checked="" type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC) | | | | 5. Lease Name or Unit Agreement Name 6. Canyon Largo Unit 6. Well Number: 489 | | | |
| 7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER | | | | | | | |
| 8. Name of Operator Huntington Energy, L.L.C. | | | | 9. OGRID 208706 | | | |
| 10. Address of Operator | | | | 11. Pool name or Wildcat | | | |
| 12. Location | Unit Ltr | Section | Township | Range | Lot | Feet from the | |
| Surface: | | | | | | | |
| BH: | | | | | | | |
| 13. Date Spudded | 14. Date T.D. Reached | 15. Date Rig Released 1/30/09 | | 16. Date Completed (Ready to Produce) | | 17. Elevations (DF and RKB, RT, GR, etc.) | |
| 18. Total Measured Depth of Well | | 19. Plug Back Measured Depth | | 20. Was Directional Survey Made? | | 21. Type Electric and Other Logs Run | |
| 22. Producing Interval(s), of this completion - Top, Bottom, Name | | | | | | | |
| 23. CASING RECORD (Report all strings set in well) | | | | | | | |
| CASING SIZE | WEIGHT LB./FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 24. LINER RECORD | | | | 25. TUBING RECORD | | | |
| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE | DEPTH SET | |
| | | | | | | | |
| | | | | | | | |
| 26. Perforation record (interval, size, and number) | | | | 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED | | | |
| 28. PRODUCTION | | | | | | | |
| Date First Production | | Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>) | | | Well Status (<i>Prod. or Shut-in</i>) | | |
| Date of Test | Hours Tested | Choke Size | Prod'n For Test Period | Oil - Bbl | Gas - MCF | Water - Bbl. | |
| | | | | | | | |
| Flow Tubing Press. | Casing Pressure | Calculated 24-Hour Rate | Oil - Bbl. | Gas - MCF | Water - Bbl | Oil Gravity - API - (<i>Corr</i>) | |
| | | | | | | | |
| 29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>) | | | | | 30. Test Witnessed By | | |
| 31. List Attachments | | | | | | | |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit. | | | | | | | |
| 33. If an on-site burial was used at the well, report the exact location of the on-site burial. | | | | | | | |
| Latitude | | | Longitude | | NAD 1927 1983 | | |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief | | | | | | | |
| Signature  | | Printed Name Catherine Smith | | Title: Regulatory | | Date | |
| E-mail Address csmith@huntingtonenergy.com | | | | | | | |

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

| Southeastern New Mexico | | Northwestern New Mexico | |
|-------------------------|------------------|-------------------------|------------------|
| T. Anhy | T. Canyon | T. Ojo Alamo 1657 | T. Penn A" |
| T. Salt | T. Strawn | T. Kirtland 1847 | T. Penn. "B" |
| B. Salt | T. Atoka | T. Fruitland | T. Penn. "C" |
| T. Yates | T. Miss | T. Pictured Cliffs 2296 | T. Penn. "D" |
| T. 7 Rivers | T. Devonian | T. Cliff House 3819 | T. Leadville |
| T. Queen | T. Silurian | T. Menefee 3883 | T. Madison |
| T. Grayburg | T. Montoya | T. Point Lookout 4526 | T. Elbert |
| T. San Andres | T. Simpson | T. Mancos 4760 | T. McCracken |
| T. Glorieta | T. McKee | T. Gallup 5617 | T. Ignacio Otzte |
| T. Paddock | T. Ellenburger | Base Greenhorn 6549 | T. Granite |
| T. Blinebry | T. Gr. Wash | T. Dakota 6595 | |
| T. Tubb | T. Delaware Sand | T. Morrison 6942 | |
| T. Drinkard | T. Bone Springs | T. Todilto | |
| T. Abo | T. | T. Entrada | |
| T. Wolfcamp | T. | T. Wingate | |
| T. Penn | T. | T. Chinle | |
| T. Cisco (Bough C) | T. | T. Permian | |

OIL OR GAS SANDS OR ZONES

No. 1, from.....5617.....to...5849.....

No. 3, from.....to.....

No. 2, from.....6595..... to. 6942.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

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

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

| From | To | Thickness In Feet | Lithology | From | To | Thickness In Feet | Lithology |
|------|------|----------------------|---|------|----|----------------------|-----------|
| 5600 | 6000 | 400 | Shale, coarse to fine grain | | | | |
| 6000 | 6504 | 504 | Shale w/minor siltstone, sandstone | | | | |
| 6504 | 6569 | 65 | Interbedded limestone and marl | | | | |
| 6569 | 6595 | 28 | Shale, dk gray to black | | | | |
| 6595 | 6942 | 347 | Sandstone, lt gray to brwn, fine grain | | | | |
| 6942 | 7100 | 158 | Shale, grn, gray, brownd, red, secondary coarse to fine grain sandstone | | | | |

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1226 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87504-2088

Form C-102

Revised October 12, 2005

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

"AS DRILLED"
WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|--|--|
| ¹ API Number 30-039-30039 | ² Pool Code 71599 | ³ Pool Name Basin Dakota |
| ⁴ Property Code 32660 | ⁵ Property Name CANYON LARGO UNIT | ⁶ Well Number 489 |
| ⁷ OGWID No 208706 | ⁸ Operator Name HUNTINGTON ENERGY, LLC | ⁹ Elevation 6725' |

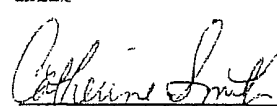
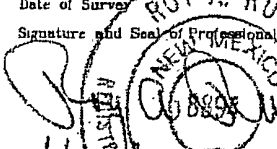
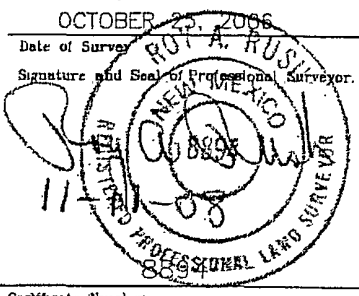
¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from line | North/South line | Feet from line | East/West line | County |
|---------------|---------|----------|-------|---------|----------------|------------------|----------------|----------------|------------|
| G | 18 | 25-N | 6-W | | 2280 | NORTH | 1920 | EAST | RIO ARriba |

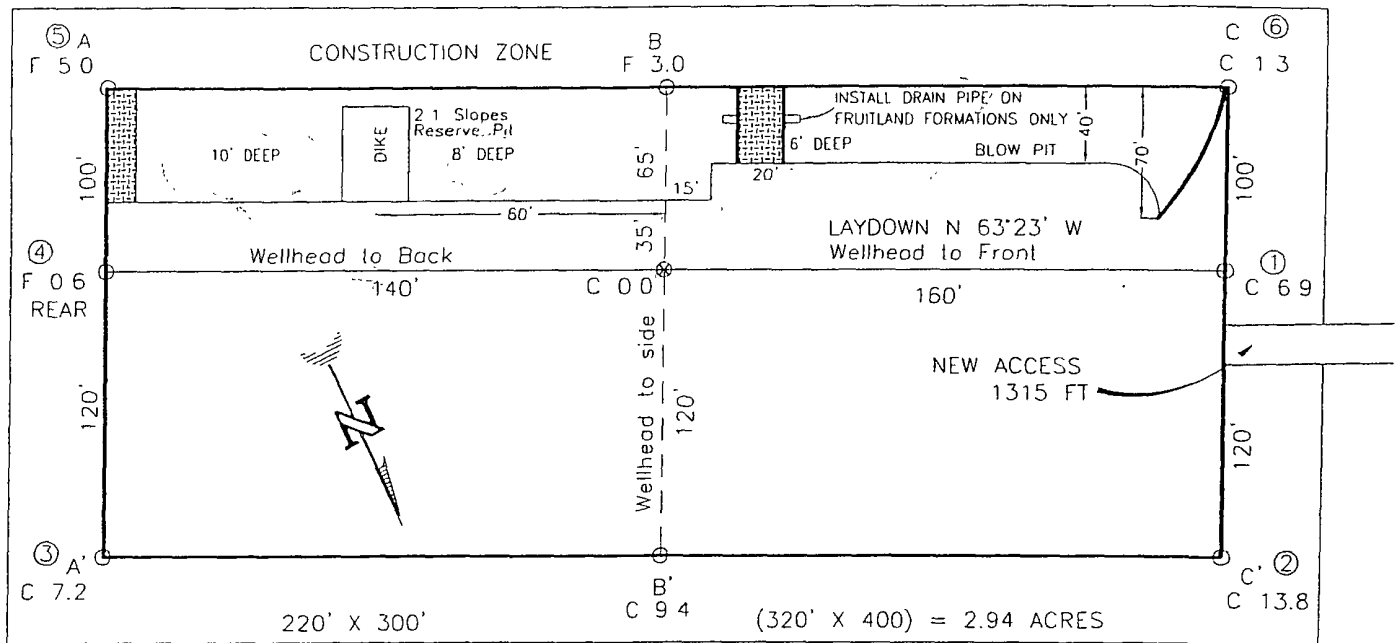
¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from line | North/South line | Feet from line | East/West line | County |
|--|---------|----------|-------------------------------|---------|----------------------------------|------------------|-------------------------|----------------|------------|
| C | 18 | 25-N | 6-W | | 660 | SOUTH | 1980 | EAST | RIO ARriba |
| ¹² Dedicated Acres E/2 - 320 | | | ¹³ Joint or Infill | | ¹⁴ Consolidation Code | | ¹⁵ Order No. | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | | | | |
|-------|--|-------------------------------|--------------------------------|----|--|
| 16 | FD 3 1/4" B.L.M. BC 1965 | S 89°42'03" W 2649.51' (M) | FD 3 1/4" B.L.M. BC 1965 | 17 | OPERATOR CERTIFICATION 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.  Signature Catherine Smith Date 3/10/09 Printed Name |
| LOT 1 | | 2280' | | | |
| LOT 2 | <u>SURFACE:</u> LAT: 36.40027° N (NAD 83) LONG: 107.50582° W (NAD 83) LAT: 36°24'00.98" N (NAD 27) LONG: 107°30'20.98" W (NAD 27) | 1920' | | | |
| LOT 3 | <u>BOTTOM HOLE</u> LAT: 36.39411° N (NAD 83) LONG: 107.50597° W (NAD 83) LAT: 36°23'38.81" N (NAD 27) LONG: 107°30'21.51" W (NAD 27) | | FD 3 1/4" B.L.M. BC 1965 | 18 | SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. OCTOBER 25, 2006 Date of Survey  Signature and Seal of Professional Surveyor.  Certificate Number |
| LOT 4 | S 89°23'58" W 2643.70' (M) FD. 3 1/4" BC. 1965 B.L.M. | B.H.L. 660' | 1980' | | |

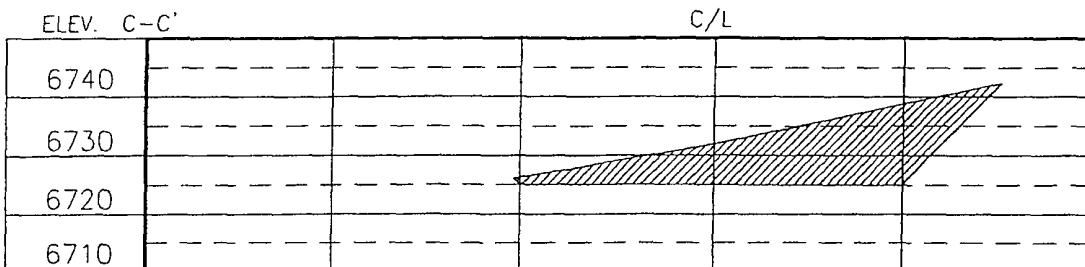
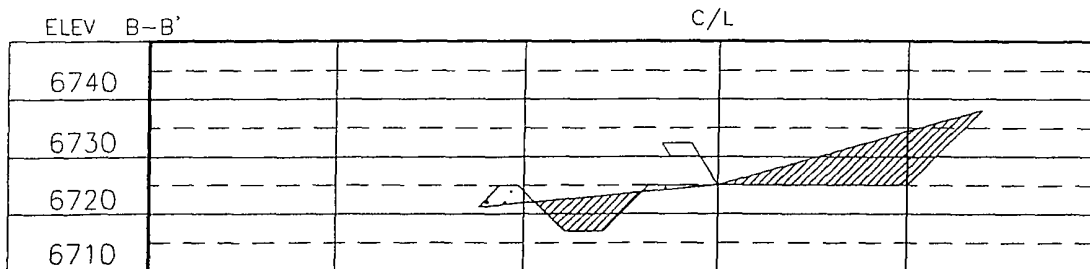
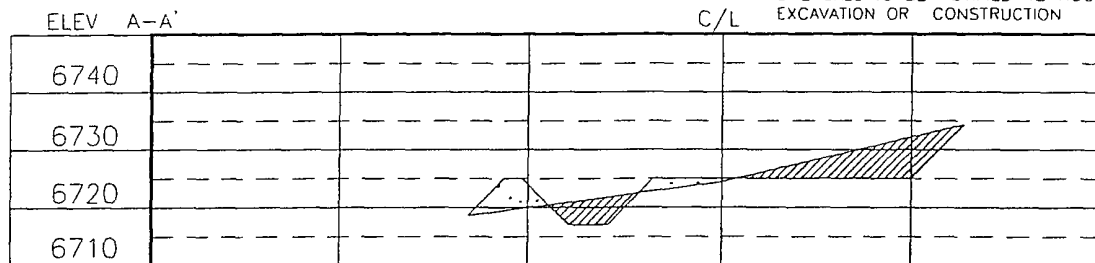
HUNTINGTON ENERGY LLC
 CANYON LARGO UNIT NO. 489, 2280 FNL 1920 FEL
 SEC. 18, T-25-N, R-6-W, N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO
 GROUND ELEVATION: 6725, DATE: OCTOBER 25, 2006



RESERVE PIT DIKE TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE)
 BLOW PIT OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE:

DAGGETT ENTERPRISES, INC IS NOT LIABLE FOR
 UNDERGROUND UTILITIES OR PIPELINES NEW MEXICO
 ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO
 EXCAVATION OR CONSTRUCTION



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR
 CABLESON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

| | | | |
|--------------|----------|-----|----|
| REVISION | DATE | CHG | BY |
| LOC. RESTAKE | 12/07/06 | CV | |

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 15068 Farmington, NM 87401
 Phone (505) 326-1772 • Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894
 CADFILE: HIG059_CFB
 DRAWN BY: A.G.

Cathy Smith

From: Cathy Smith
Sent: Friday, May 15, 2009 2 52 PM
To: 'brandon.powell@state nm us'
Cc: Alan McNally
Subject: CLU 489

Brandon,

Notice of Pit Closure for the Canyon Largo Unit #489, May 1, 2009

CLU 489
API# 30-039-30039
Lease # NMSF 078882
SWNE Sec 18, T25N-R6W
Rio Arriba Co , NM

Cathy Smith
(405) 840-9876 ext. 129
(405) 840-2011 Fax



Kelly, Jonathan, EMNRD

From: Cathy Smith [CSmith@huntingtonenergy.com]
Sent: Tuesday, November 29, 2011 2:20 PM
To: Kelly, Jonathan, EMNRD
Subject: CLU 482

Jonathan,

I sent a notification email for pit closure for the CLU 489 to the NMOCD – Brandon Powell, but failed to include Mark Kelly w/BLM. It was totally an error on my part. I will make sure in the future to include both entities.

Thank you.

Cathy Smith
Huntington Energy, L.L.C.
908 N.W. 71st St.
Oklahoma City, OK 73116
(405) 840-9876 ext. 129



HUNTING TOWN EAGER, LLC

CANYON LAPEER UNIT #409

LS # UNST 070002

API # 35-0033-30033

SUPP 16 16, NE 1/4 SEC 16-20-16

BHL 16 16, SE 1/4 SEC 16-20-16

16 16, SE 1/4 SEC 16-20-16