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.

9462

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 **HALLADOR PETROLEUM LLP** OGRID #: **12672**

Address **1660 LINCOLN ST., SUITE 2700, DENVER, CO 80264**

Facility or well name **HORTON 1A (south tank)**

API Number. **30-045-21955** OCD Permit Number. _____

U/L or Qtr/Qtr **G** Section **7** Township **31 N** Range **11 W** County. **SAN JUAN**

Center of Proposed Design. Latitude **36.91505° N** Longitude **108.02845° W** NAD. ☐1927 ☒ 1983

Surface Owner ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

RCVD DEC 15 '08
OIL CONS. DIV.
DIST. 3

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 mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

☐ String-Reinforced

Liner Seams ☐ Welded ☐ Factory ☐ Other _____ Volume. bbl Dimensions: L ' x W ' x D '

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 **70** bbl Type of fluid. **produced water**

Tank Construction material. **single wall fiberglass**

☐ 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 **48" high (= 36" hog wire + rebar top)**

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	☐ Yes ☒ 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	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site, Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ 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	☐ Yes ☒ 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	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources, USGS, NM Geological Society, Topographic map	☐ Yes ☒ No
Within a 100-year floodplain - FEMA map	☐ Yes ☒ 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 H_2S, 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 indentify 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site, Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a 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	☐ Yes ☐ 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	☐ Yes ☐ No
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources, USGS; NM Geological Society, Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ 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) **BRIAN WOOD** Title **CONSULTANT**

Signature _____ Date **12-8-08**

e-mail address **brian@permitswest.com** Telephone **(505) 466-8120**

20.

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

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 3/09/2012

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:** _____

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 indentify 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 _____ Longitude _____ 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) _____ Title: _____

Signature _____ Date: _____

e-mail address: _____ Telephone: _____

Hallador Petroleum LLP
Horton 1A below grade tanks proposed closure
1850' FNL & 1690' FEL Sec. 7, T. 31 N., R. 11 W.
San Juan County, New Mexico
API # 30-045-21955

Current Situation

There are two (25 & 70) barrel single wall fiberglass tanks. The 25 barrel tank is west of the well head. The 70 barrel tank is south of the well head. Side walls are visible. Tanks are surrounded by hog wire fences. There is no secondary containment. The tanks have nylon net tops. After removal of the existing tanks, water will be piped to a planned below grade tank. Application for it will be made once the design is completed.

Time Line

Will close after approval of this application and before June 16, 2013. Will close earlier if OCD determines there is an imminent danger to fresh water, public health, or the environment.

Siting Criteria

1. Closest reported water depth is the Jones water well which is ≈5,500' northwest in 1-31n-12w. Office of the State Engineer records are attached as Exhibit A.

≈6,457' Jones water well ground elevation
- 161' depth to water
≈6,296' water level elevation

Water level elevation at the Jones water well is 40' higher than the ground level elevation (6,256') at this gas well. Ground water is more than 13' below ground level at the gas well based on a 1999 excavation conducted by PNM (Exhibit B). Ground water is believed to be more than 100' below the bottom of the tanks based on depth (479') to the Ojo Alamo sandstone in this well.

2. Tank is not within 300' of a continuously flowing watercourse. Tank is not within 200' of any other significant watercourse as defined by OCD. Closest first order tributary of Estes Arroyo is >1/4 mile south (Exhibit C).

3. Tank is not within 300' of any building (Exhibits C & D). Closest buildings

(houses) are >3/4 mile northwest.

4. Tank is not within 1,000' of any fresh water well or spring (Exhibits A & C).

5. Tank is not within municipal boundaries or within a municipal fresh water well field (Exhibits A & C).

6. Tank is not within 500' of a wetland (Exhibit E).

7. Tank does not overly a mine (Exhibit F).

8. Tank is not in an unstable area. No evidence of earth movement was found during a November 13, 2008 field inspection.

9. Tank is not within a 100 year flood plain (Exhibit G).

10. C-102 is attached as Exhibit H.

11. Closure notice to the surface owner (BLM) is attached as Exhibit I.

Hydrogeology

Surface formation is the Nacimiento. According to Stone et al in Hydrogeology and water resources of San Juan Basin, New Mexico, the Nacimiento is mainly a mudstone. There are also medium to coarse grained sandstone layers in the Nacimiento. Transmissivities of 100 feet^2 per day can be found in the coarser continuous sandstones. Water in the more extensive sandstones has a specific conductance of 1,500 μmhos. Specific conductance is >2,000 μmhos in the finer grained sandstones.

Closure Plan

Surface owner has been notified via certified return receipt requested mail of the proposed closure.

Will verbally notify OCD at least 72 hours and no more than 1 week before closure. Notice to OCD will include operator name, location (quarter-quarter, section, township, & range), well name & number, and API number.

Will pump out any remaining water and haul to Basin Disposal (NM-01-005)

Will haul sludge to J F J Land Farm (NM-01-010).

Will truck waste qualifying under OCD Rule 19.15.9.712 to the San Juan County landfill.

Will remove tank, pipes, and associated equipment and store at company yard for future reuse.

Will test soil under tank to determine if a release has occurred, even if there is no visible contamination. Will collect, at a minimum, a five point composite sample. Will collect individual grab samples from any area that is wet, discolored, or showing other evidence of a release. Will analyze all samples for:

Component	Test Method	Not to Exceed (mg/kg)
benzene	EPA SW-846 8021B or 8260B	0.2
total BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA 418.1	100
chlorides	EPA 300.1	250 or background

If the operator or OCD determines that a release has occurred, then the operator will comply with OCD rules 19.15.3.116 NMAC and 19.15.1.19 NMAC,

as appropriate. A major (>25 barrels) release requires immediate verbal notice and timely written notice to OCD. A minor release (more than 5 barrels and less than 25 barrels) requires timely written notice to OCD. Timely is defined as 15 days. Written notice will include Form C-141. OCD may require additional sampling delineation upon its review of the results.

If the sampling program demonstrates that a release has not occurred, or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC (table on preceding page); then the operator will back fill the excavation with compacted waste free earthen material, construct an OCD prescribed soil cover, recontour, and revegetate the site. The soil cover, recontouring and re-vegetation requirements will comply with Subsections G, H and I of 19.15.17.13 NMAC. Specific steps are:

___ back fill to within 12" of grade
___ bring to grade with 12" topsoil or background thickness, whichever is more
___ contour to prevent ponding or erosion
___ seed first growing season after closure
___ seed with at least 3 native species, at least 1 of which must be a grass (recommend grass species only for safety & keep seed bag tag)
___ seed mix will exclude noxious weeds
___ cover seed

Will file closure report on Form C-144 within 60 days of closure completion with necessary attachments to document all closure activities including:
___ proof of notice to surface owner
___ proof of notice to OCD
___ plot plan
___ chemical sampling analysis results
___ disposal facility name and permit number
___ back filling & cover details
___ seeding rate per species
___ how seeded
___ photograph of seeded area

Successful revegetation will be accomplished if:

___ plant cover equals 70% of adjacent impact free native perennial vegetation (noxious weeds are not counted toward 70% goal)

___ 70% goal maintained for 2 consecutive growing seasons without irrigation if unsuccessful, repeat until goals is achieved

___ notify OCD when 70% goal has been met for 2 consecutive growing seasons

___ file Form C-144

___ include photograph of revegetated area

Executed this 8th day of December, 2008.

Brian Wood, Consultant
Permits West, Inc.
37 Verano Loop, Santa Fe, NM 87508
(505) 466-8120 FAX: (505) 466-9682 Cellular: (505) 699-2276

The operator's representative is:

Tim Lovseth
Hallador Petroleum LLP
1660 Lincoln St., Suite 2700
Denver, CO 80264
(303) 839-5504, Extension 317

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 11W Sections: 7

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○Non-Domestic ○Domestic ◉All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

POD / SURFACE DATA REPORT 12/07/2008

DB File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Tws	Rng	Sec	q	q	q	X Y are in Feet Zone	X	Y	UTM

No Records found, try again

New Mexico Office of the State Engineer 12/7/08 12:17 PM

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 12W Sections: 1

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○Non-Domestic ○Domestic ◉All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

WATER COLUMN REPORT 12/07/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
SJ 03488	31N	12W	01	3	3	2				150		
SJ 03738 POD1	31N	12W	01	4	1	3				115	50	65
SJ 02034	31N	12W	01	4	3					85	55	30
SJ 03134	31N	12W	01	4	3	2				80	20	60
SJ 03022	31N	12W	01	4	3	2				490	250	240
SJ 01660	31N	12W	01	4	3	3				320	275	45
SJ 01649	31N	12W	01	4	3	4				220	161	59
SJ 03660	31N	12W	01	4	3	4				70	42	28
SJ 02099	31N	12W	01	4	4					95		

Record Count: 9

EXHIBIT A

OK

District I
P O Box 1980, Hobbs NM

District II
P O Drawer DD Artesia NM 88221

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

RECEIVED
NOV - 1 1999
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Kimbark) Telephone: 324-3764

Address: 603 W Elm Street Farmington, NM 87401

Facility or Well Name: Horton #1A

Location: Unit G Sec 7 T 31 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☑ Other

Land Type: BLM ☑ State ☐ Fee ☐ Other

Pit Location: (Attach diagram) Pit dimensions. length 15 ' width 15 ' depth 2 '

Reference wellhead ☑ other

Footage from reference 81'

Direction from reference 45 Degrees ☐ East North ☐ of ☑ West South ☑

Depth to Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	0
Wellhead Protection Area: (Less than 200 feet from a private domestic water source or, less than 1,000 feet from all other water sources)	Yes No	(20 points) (0 points)	0
Distance to Surface Water: (Horizontal distance to perennial lakes ponds rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet 200 feet to 1,000 feet Greater than 1,000 feet	(20 points) (10 points) (0 points)	0
	RANKING SCORE · (TOTAL POINTS) :		0

EXHIBIT B

Horton #1A

Date Remediation Started: 05/19/1999 Date Completed: 05/19/1999

Remediation Method: (Check all appropriate sections) Excavation X Approx. Cubic Yard 659

Landfarmed X Amount Landfarmed (cubic yds) 600

Other 59 cu yds overburden

Remediation Location: (i e , landfarmed onsite, name and location of offsite facility) Onsite X Offsite

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 37' X 37' X 13' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

Ground Water Encountered: No ☑ Yes ☐ Depth

Final Pit Closure Sampling: (if multiple samples, attach sample result and diagram of sample locations and depths)

Sample Location 5 pt composite - bottom.

Sample depth 13'

Sample date 05/19/1999 Sample time 2 15 00 PM

Sample Results

Benzene (ppm)

Total BTEX (ppm)

Field headspace (ppm) 5 4

TPH (ppm) < 25 00 Method 8015B

Vertical Extent (ft) Risk Analysis form attached Yes ☐ No ☑

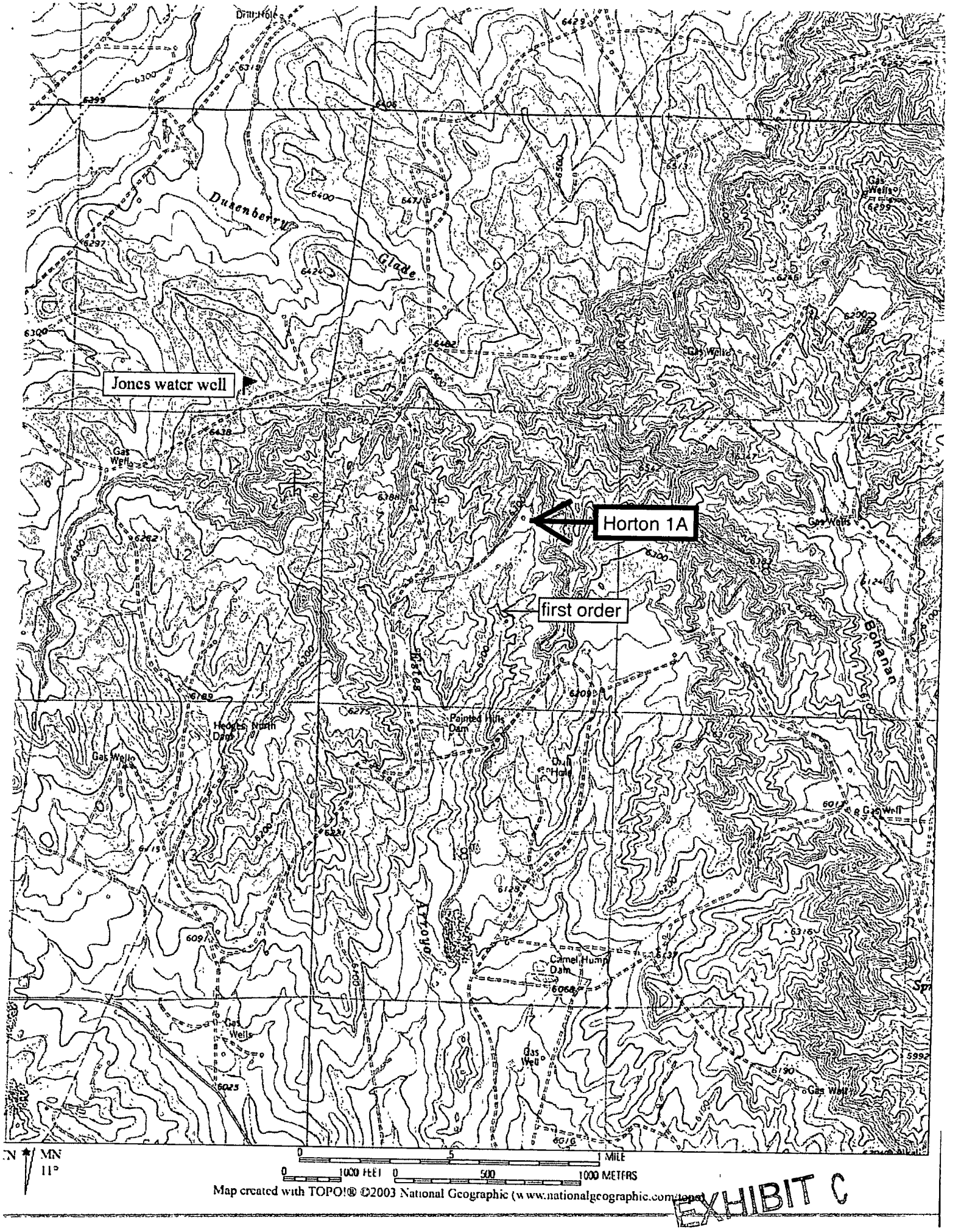
Ground Water Sample: Yes ☐ No ☑ (If yes, see attached Groundwater Site Summary Report)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE October 28, 1999

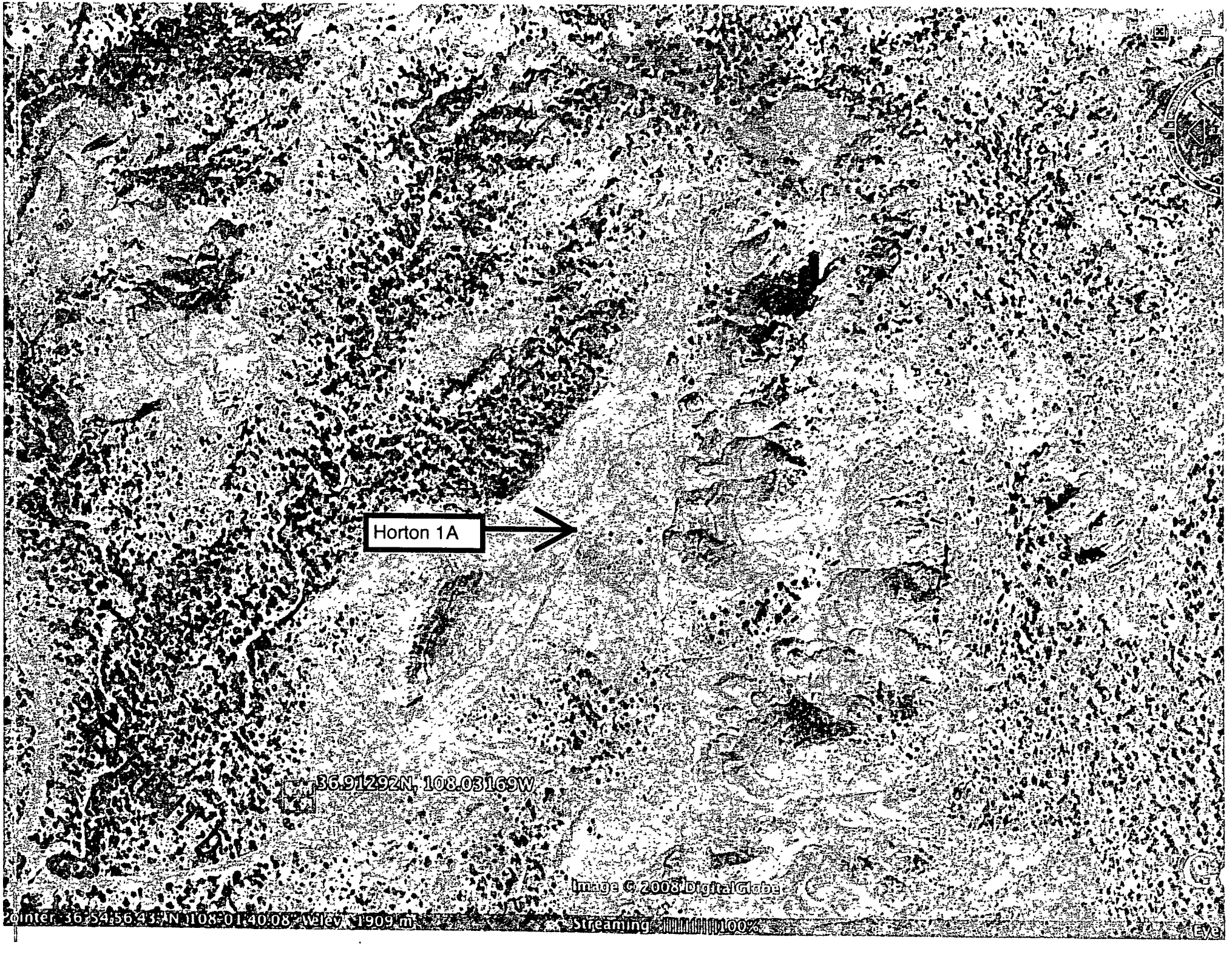
SIGNATURE Maureen Gannon

PRINTED NAME AND TITLE Maureen Gannon Project Manager

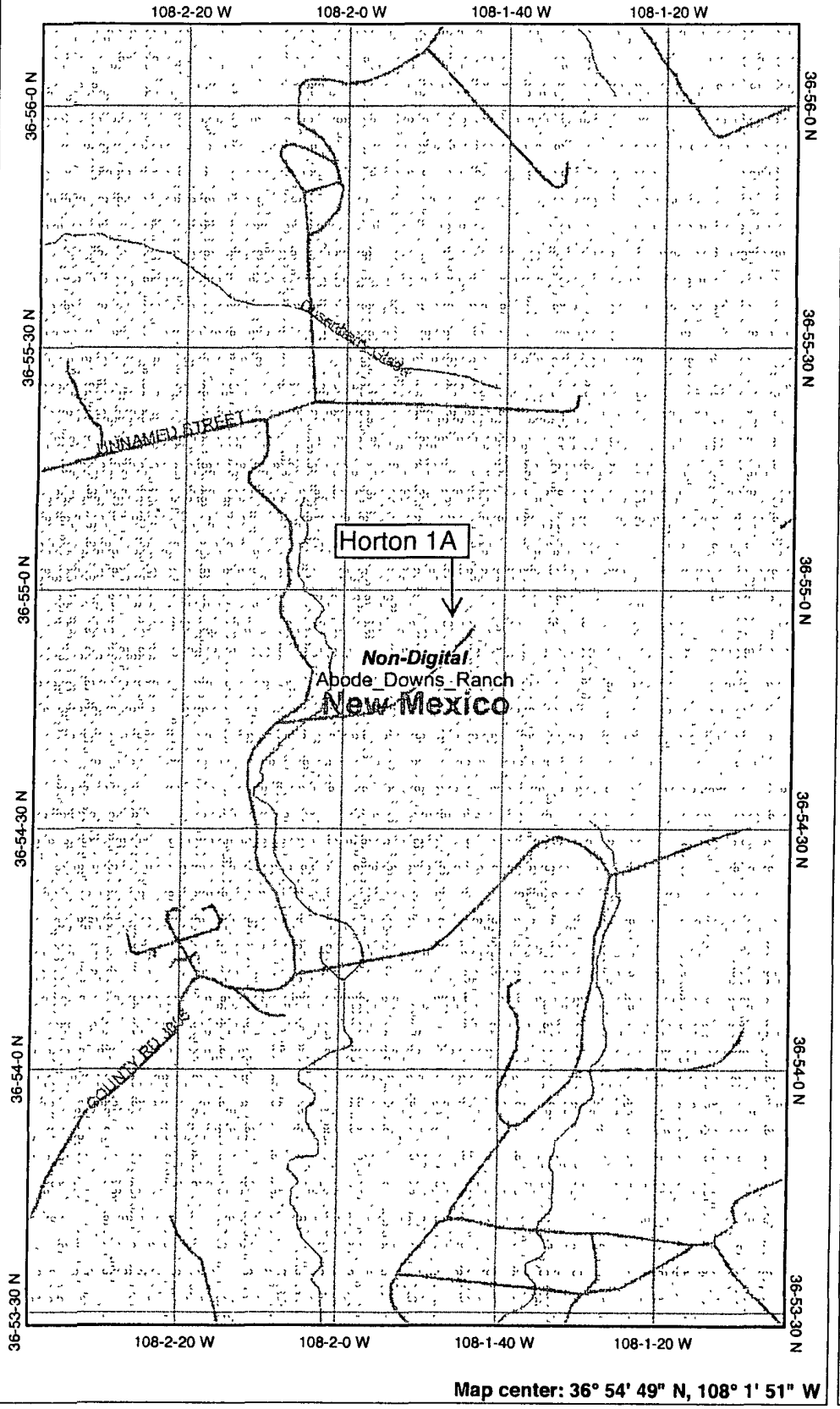


Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

EXHIBIT C


Horton 1A
36.91292N, 108.03169W
Image © 2008 DigitalGlobe
Pointer 36°54'56.43" N 108°01'40.08" W elev 1909 m
Streaming 100%

7-31n-11w wetland map



Legend

- Interstate
- Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K
- Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan
- NHD Streams
- Counties 100K
- States 100K
- South America
- North America

EXHIBIT E

Scale: 1:24,000

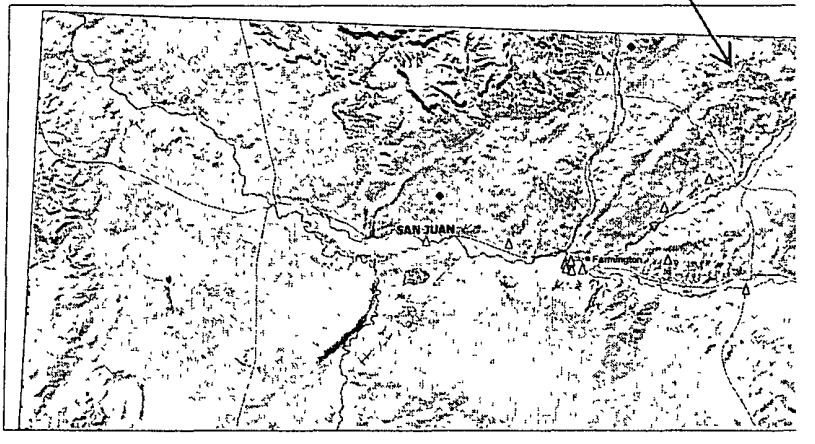
Map center: 36° 54' 49" N, 108° 1' 51" W

MMQonline Public Version

Horton 1A

Mines, Mills & Quarries Commodity Groups

- △ **Aggregate & Stone Mines**
- ◆ **Coal Mines**
- ☆ **Industrial Minerals Mines**
- ▽ **Industrial Minerals Mills**
- ▨ **Metal Mines and Mill Concentrate**
- ▩ **Potash Mines & Refineries**
- ⊐ **Smelters & Refinery Ops.**
- ☣ **Uranium Mines**



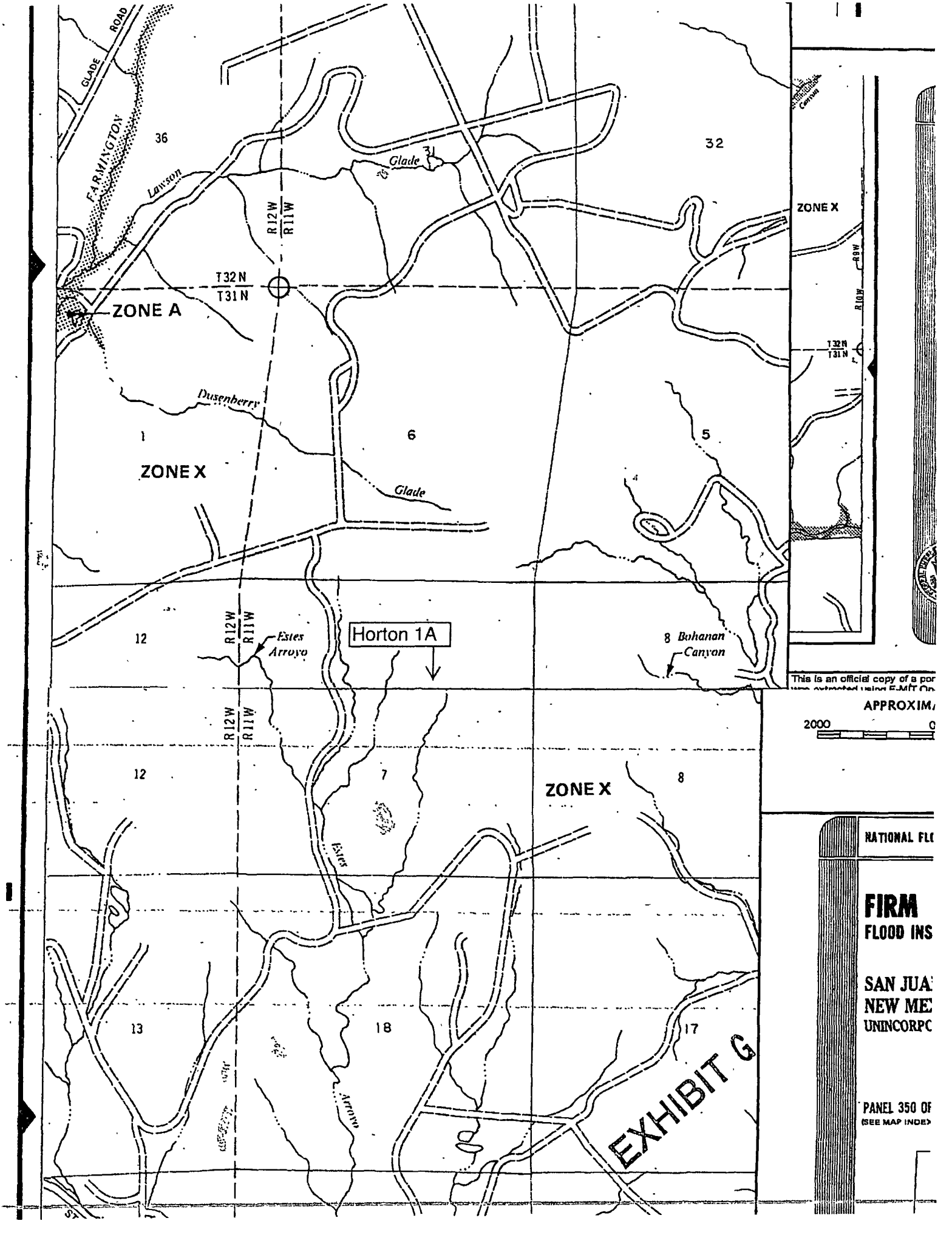
N

SCALE 1 : 974,401

10 0 10 20 30

MILES

EXHIBIT F


GLADE ROAD
FARMINGTON
Lawson
Glade
Dusenberry
Glade
Estes Arroyo
Bohanan Canyon
Estes
Arroyo
36
31
32
1
6
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7
8
13
18
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R12W
R11W
T32N
T31N
ZONE A
ZONE X
ZONE X
ZONE X
Horton 1A
EXHIBIT G
ZONE X
R8W
R10W
T32N
T31N
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FIRM
FLOOD INS
SAN JUA
NEW ME
UNINCORPC
PANEL 350 OF
(SEE MAP INDE

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
KIMBARK OPERATING COMPANY	HORTON	5 1A

Unit Letter	Section	Township	Range	County
G	7	31 NORTH	11 WEST	SAN JUAN

Actual Footage Location of Well:
1850 feet from the NORTH line and 1690 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6256	MESA VERDE-DAKOTA ~~PC~~	Blanco E Basin Dakota	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

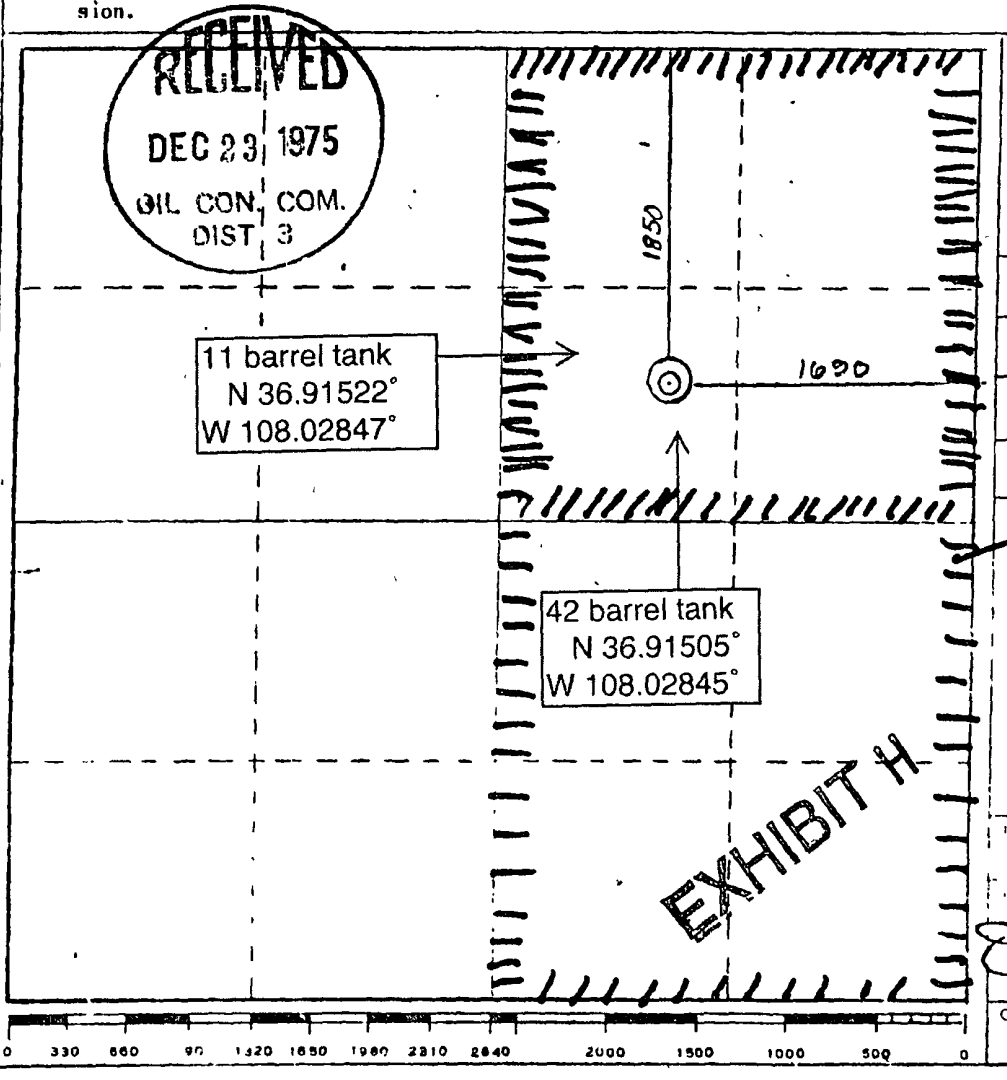
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

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

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

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



CERTIFICATION

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

Name: Walter K. Arbuckle

Position: President

Company: Kimbark Operating Co.

Date: 12/19/75

Dakota

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

Date Surveyed: 10 December 1975

James P. Leese

Certificate No. 1463

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

December 8, 2008

BLM
1235 LaPlata Highway
Farmington, NM 87401

As required by NMOCD rule Subsection J of 19.15.17.13 NMAC, I am notifying BLM that Hallador Petroleum LLP plans to close the following below grade tanks on BLM surface in San Juan County, NM:

Well	API Number	Lease	Location
Horton 1A	30-045-21955	NMSF-078095-A	SWNE 7-31n-11w
Horton 1B	30-045-30165	NMSF-078095-A	NWSE 7-31n-11w
Horton 1C	30-045-33061	NMSF-078095-A	NENE 7-31n-11w
Horton 1D	30-045-33065	NMSF-078095-A	NESE 7-31n-11w
Horton 2	30-045-11371	NMSF-078039	NENE 22-32n-11w
Horton 2A	30-045-23392	NMSF-078039-B	SESE 22-32n-11w
Horton 3B	30-045-31703	NMSF-078147-A	NENE 13-32n-12w
Horton 5	30-045-22933	NMSF-078095-A	SWNE 7-31n-11w
Horton 7	30-045-21362	NMSF-078039	SWSE 22-32n-11w
Storey 1A	30-045-21957	NMSF-078051-A	SESE 34-32n-11w
Storey 1B	30-045-30164	NMSF-078051-A	SESW 34-32n-11w
Storey 1C	30-045-31704	NMSF-078051-A	NWSE 34-32n-11w

I have attached a copy of this letter for each of the 12 well files. Please call me if you have any questions.

Sincerely,

B Wood

Brian Wood

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
OFFICIAL USE

Postage	$ 1.17
Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	2.20
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.07

QUICKSEND CPU SANTA FE, NM 87508 Postmark Here DEC 08 2008 USPS

Sent To BLM
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

EXHIBIT 1

Power of Attorney

Know All Men By These Presents:

That I, Victor P. Stabio, Chief Executive Officer and President of Hallador Petroleum Company, with offices at 1660 Lincoln Street, Suite 2700, Denver, Colorado 80264, have made, constituted, and appointed, and by these presents do make, constitute and appoint Brian Wood of Permits West, Inc., whose address is 37 Verano Loop, Santa Fe, New Mexico 87505, my true and lawful attorney, for me, and in my name, place and stead, and to my use to sign any and all forms submitted on behalf of Hallador Petroleum Company to the New Mexico Oil Conservation Division.

This Power of Attorney is execute this 8th day of December, 2008, but shall be effective for all intents and purposes as of June 16, 2008.

By: _____
Victor P. Stabio
Chief Executive Officer and President of
Hallador Petroleum Company

Corporate Acknowledgment

STATE OF COLORADO }
CITY AND } §
COUNTY OF DENVER }

Before me, a Notary Public in and for said County and State, on this 8th day of December, 2008, personally appeared Victor P. Stabio, Chief Executive Officer and President of Hallador Petroleum Corporation, a Colorado corporation, on behalf of said corporation.

JANE SANDERS NOTARY PUBLIC STATE OF COLORADO
My Commission Expires 06/07/2011

_____
Jane Sanders, Notary Public
1660 Lincoln Street, Suite 2700
Denver, Colorado 80264

My commission expires:
June 7, 2011