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.

342

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: **Merrion Oil & Gas Corporation** OGRID #: **14634**
Address: **610 Reilly Ave Farmington, NM 87401**
Facility or well name: **U Da Well #2**
API Number: **30-045-31280** OCD Permit Number: _____
U/L or Qtr/Qtr **B** Section **2** Township **31N** Range **8W** County: **San Juan**
Center of Proposed Design: Latitude **36.93055560 N** Longitude **107.64305560W** 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: **1140** bbl Dimensions: L **80** x W **40** x D **8**

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: **Steel Mesh**

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): Philana Thompson Title: Regulatory Compliance Specialist

Signature: Philana Thompson Date: 9/10/08

e-mail address: pthompson@merrion.bz Telephone: 505-324-5336

20.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Brandt Powell **Approval Date:** 9/10/08

Title: Environ Spec **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:

New Mexico Office of the State Engineer
POD Reports and Downloads

Township [32N] Range [08W] Sections [35]

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 09/09/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest X Y are in Feet UTM are in Meters)

POD File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	UTM_Zone	Easting	Northing	Start Date	Finish Date	Depth Well	Depth (in fe Water
SJ 02726	SAN	3	RICHARD W. STOREY	SJ 02726	Shallow	32N	08W	35	1	4	2				13	264385	4091811	07/27/1999	07/29/1999	300	300
SJ 03379	DOM	3	ROD MOORE	SJ 03379		32N	08W	35	1	3					13	263891	4091728			500	

Record Count: 2

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 08W Sections:

NAD27 X: Y: Zone: Search Radius:

County: SJ 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 08/14/2008

(acre ft per annum) (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) X Y are in Feet UTM are in Meters)

DB File Nbr	Use	Diversion	Owner	POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	UTM Zone	Easting	Northing	Start Date	Finish Date	Depth Well	Depth (in f Water
SJ 00012	NOT	0	U.S. GOVERNMENT	SJ 00012	Shallow	31N	08W	30	2						13	258218	4084189	10/10/1952	10/31/1952	1021	475
SJ 00198	OFM	30	STATE OF NEW MEXICO COMMISSION	SJ 00198	Artesian	31N	08W	32	3	3	4				13	258895	4081451		04/25/1975	2003	
SJ 00614	DOM	3	J. T. DAVIS	SJ 00614		31N	08W	25	3	3					13	265228	4082969				
SJ 00615	DOM	0	W. G. GRILLOS	SJ 00615		31N	08W	25	4	3					13	266023	4082942				
SJ 01011	DOM	3	SANDRA G. JACKSON	SJ 01011		31N	08W	24	3	3					13	265257	4084545				
SJ 01167	DOM	3	ERNEST T. FACHAN	SJ 01167	Shallow	31N	08W	24	4	4	3				13	266352	4084410	02/21/1981	02/28/1981	465	390
SJ 01812	DOM	3	ERNEST R. CONLEY	SJ 01812		31N	08W	25							13	265831	4083572				
SJ 01818	DOM	3	H. R. HUBBLE	SJ 01818		31N	08W	25	4	3					13	266023	4082942				
SJ 01822	DOM	3	ARNOLD HUDGEONS	SJ 01822	Shallow	31N	08W	25	2	2	2				13	266540	4084216	10/25/1996	10/26/1996	550	500
SJ 02029	DOM	3	ROY WROTEN	SJ 02029		31N	08W	25	3	1	1				13	265134	4083462				
SJ 03306	DOM	3	JIMMIE BALES	SJ 03306	Shallow	31N	08W	25	1	4	4				13	265739	4083645	11/03/2003	11/17/2003	600	500
SJ 03651	DOM	3	RICHARD ROMERO	SJ 03651		31N	08W	24	4	2	1				13	266354	4085002				

Record Count: 12

State of New Mexico
Energy. Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C - 102

DEC 2002 RECEIVED OIL CON. DIV.

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code	Pool Name
30-045-31280	71629	Basin Fruitland Coal

Property Code	Property Name	Well Number
24565	U Da Well Com	2

OGRID No.	Operator Name	Elevation
014634	MERRION OIL & GAS	6710'

Surface Location

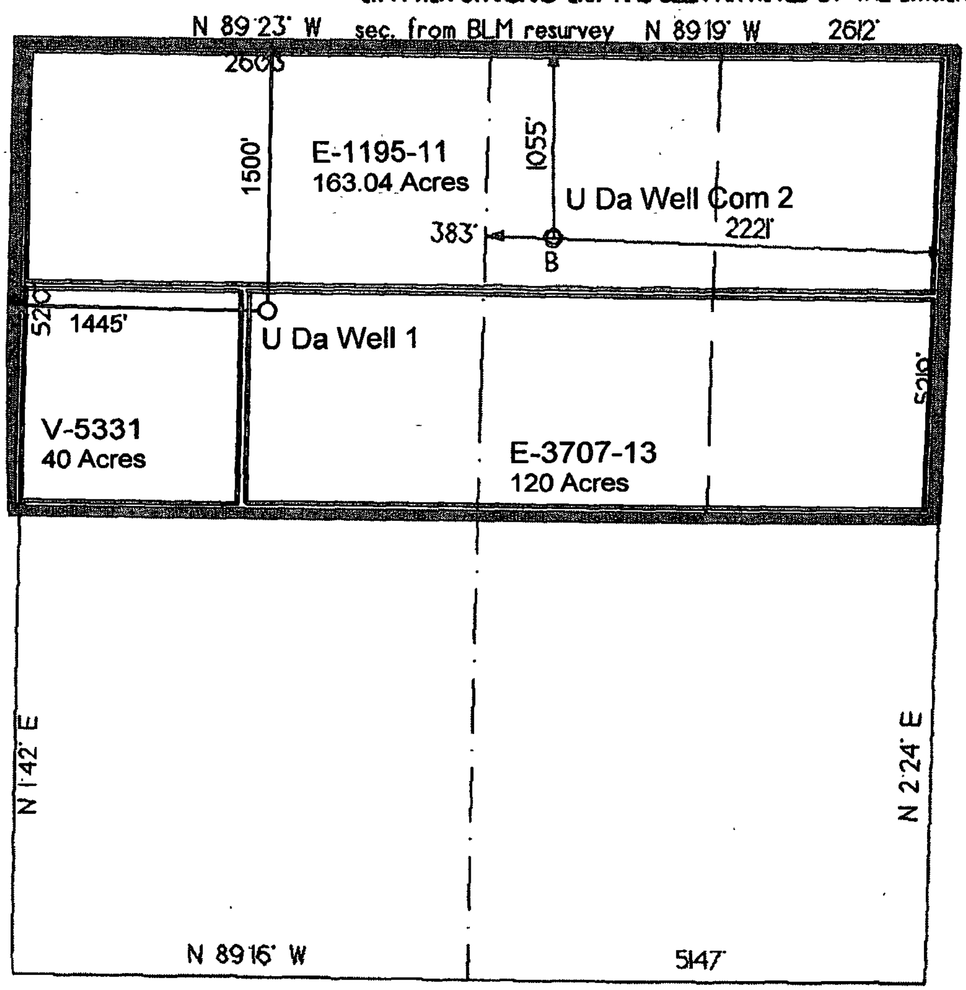
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from>	North/South	Feet from>	East/West	County
B	2	31 N.	8 W.	nwne	1055'	NORTH	2221'	East	SAN JUAN

Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from>	North/South	Feet from>	East/West	County

Dedication	Joint ?	Consolidation	Order No.
~~320 Ac~~ 323.04			

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



OPERATOR CERTIFICATION

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

Signature [signature]

Printed Name Connie S. Dinning

Title Production Engineer

Date December 2, 2002

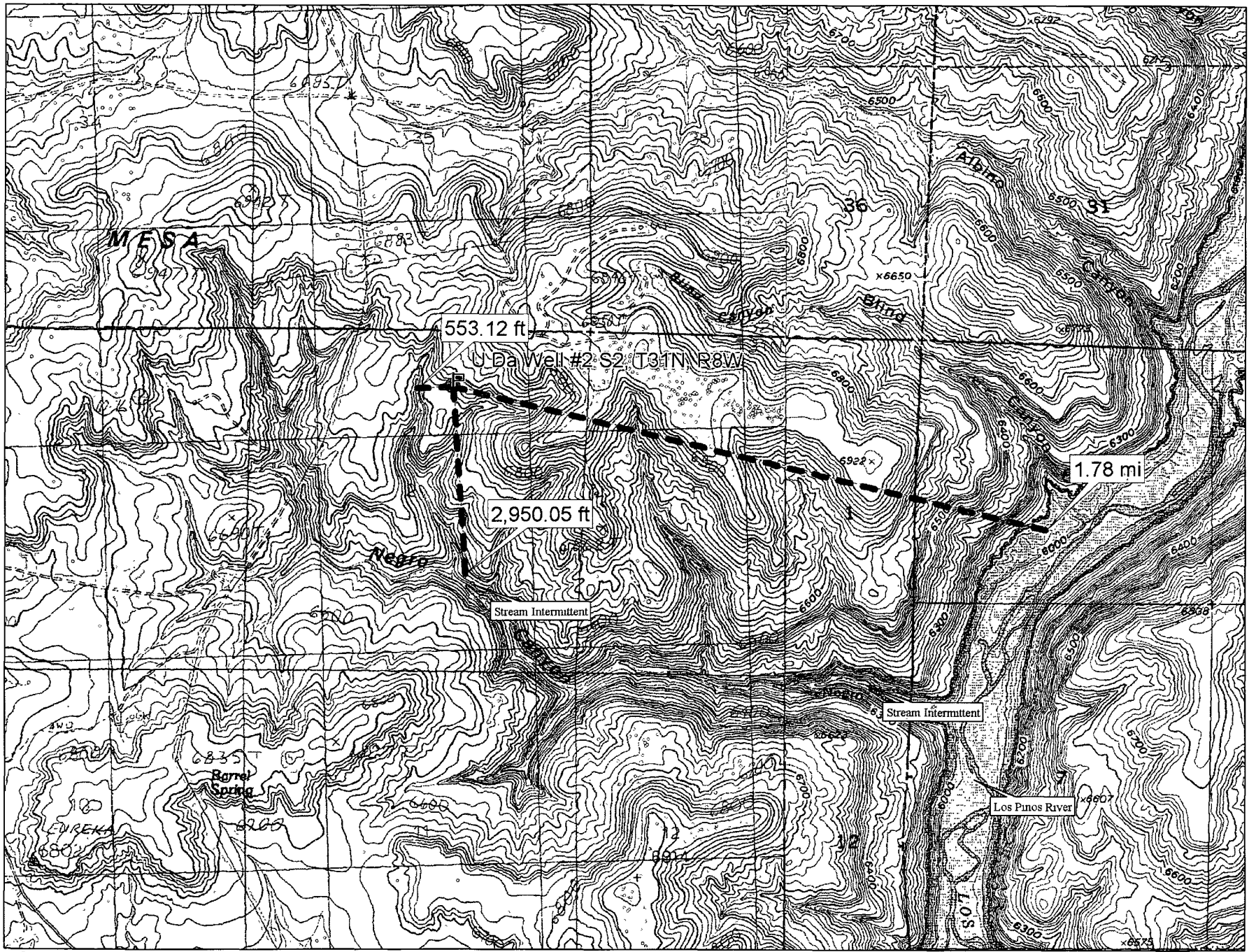
SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey 11-22-02

Signature and Seal of Professional Surveyer

[Seal: GERALD G. HUDDLESTON, NEW MEXICO, 6844, REGISTERED LAND SURVEYOR] [signature]



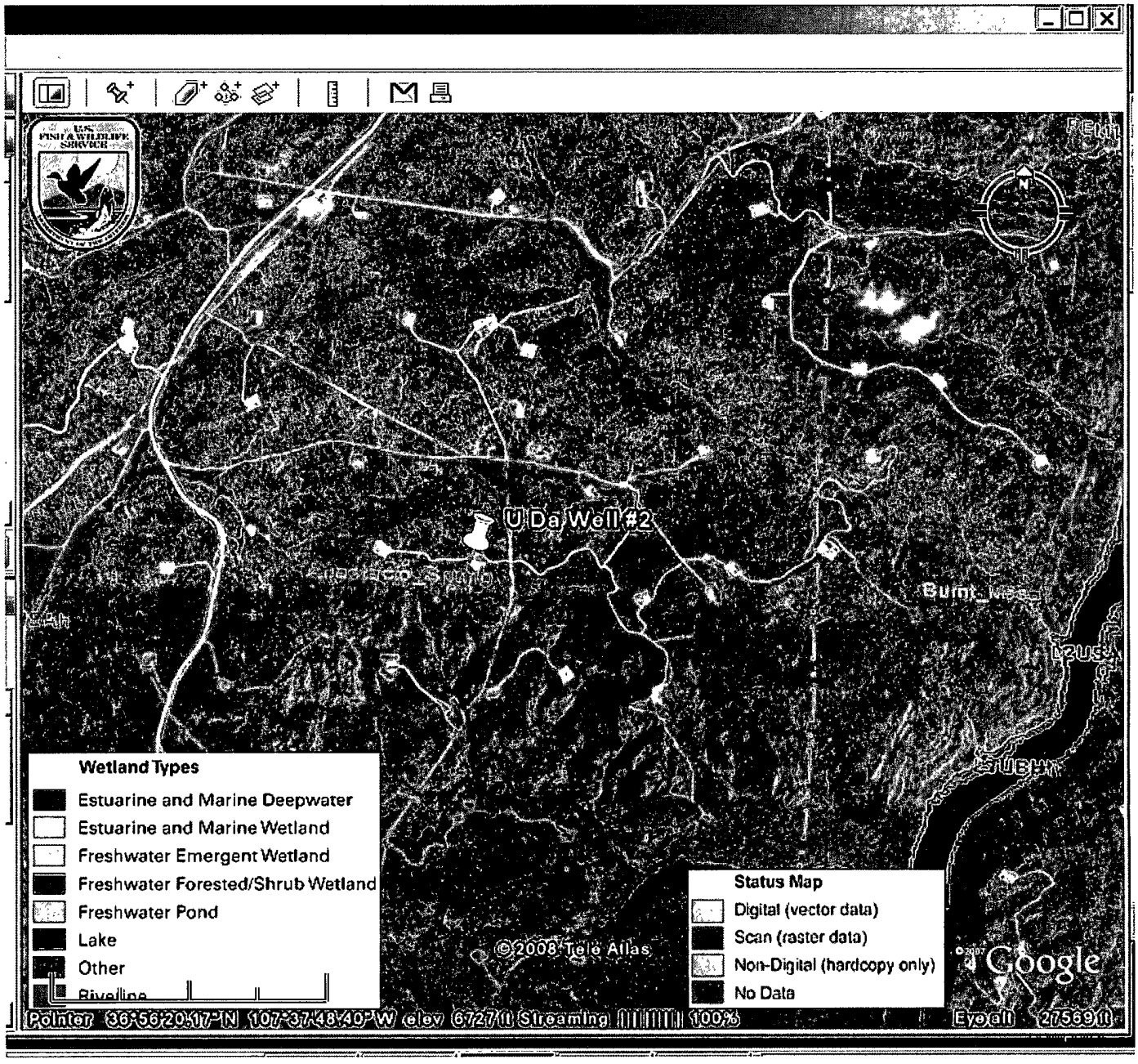
Scale: 1 : 24,000 Zoom Level: 13-1 Datum: WGS84 Map Rotation: 0° Magnetic Declination: 11.1°E

1,000 ft

U Da Well #2

Wetland Map & satellite Image

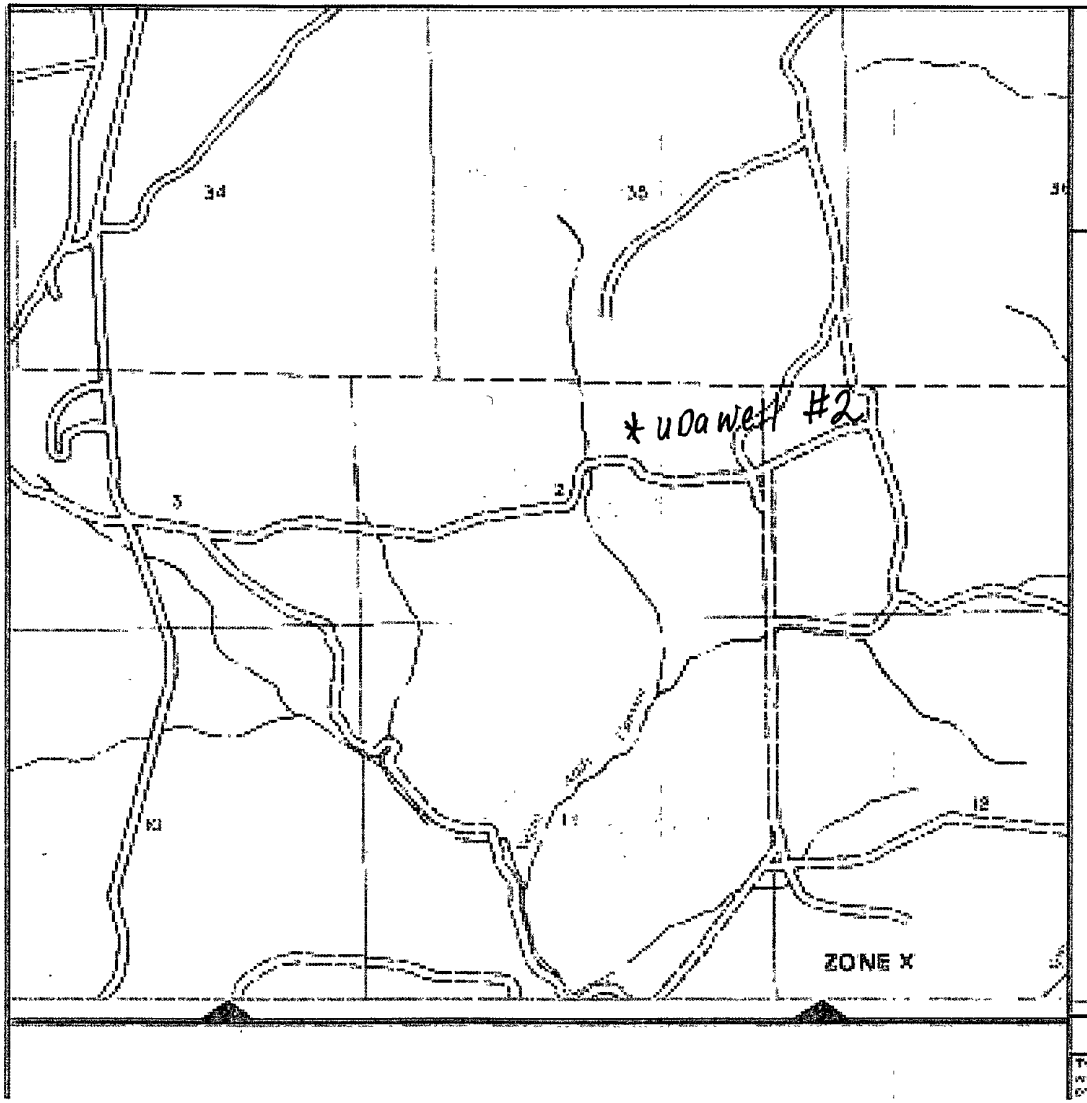
S2, T 31N, R 8W



FEMA MSC Viewer

Save your FIRMette

Back



APPROXIMATE SCA

FIRM
FLOOD INSURANCE RATE MA

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

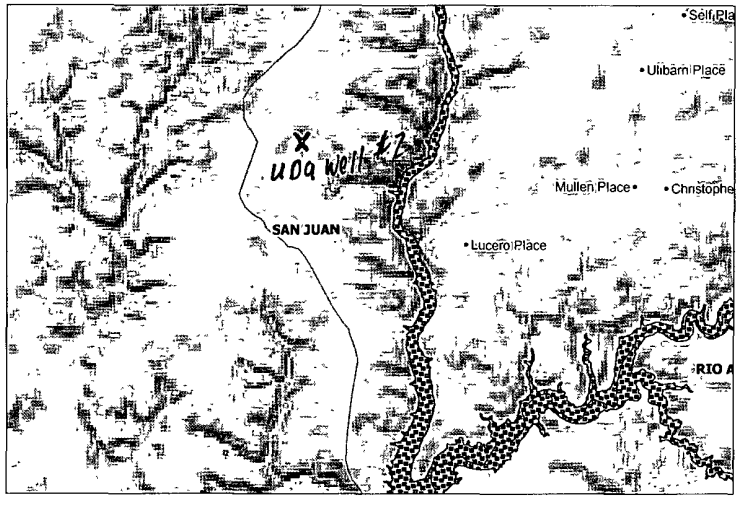
COMMUNITY-PANEL NUMBE

EFFECTIVE DATE

MMQonline Public Version

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**
- **Uranium Mills**



SCALE 1 : 250,000

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MILES

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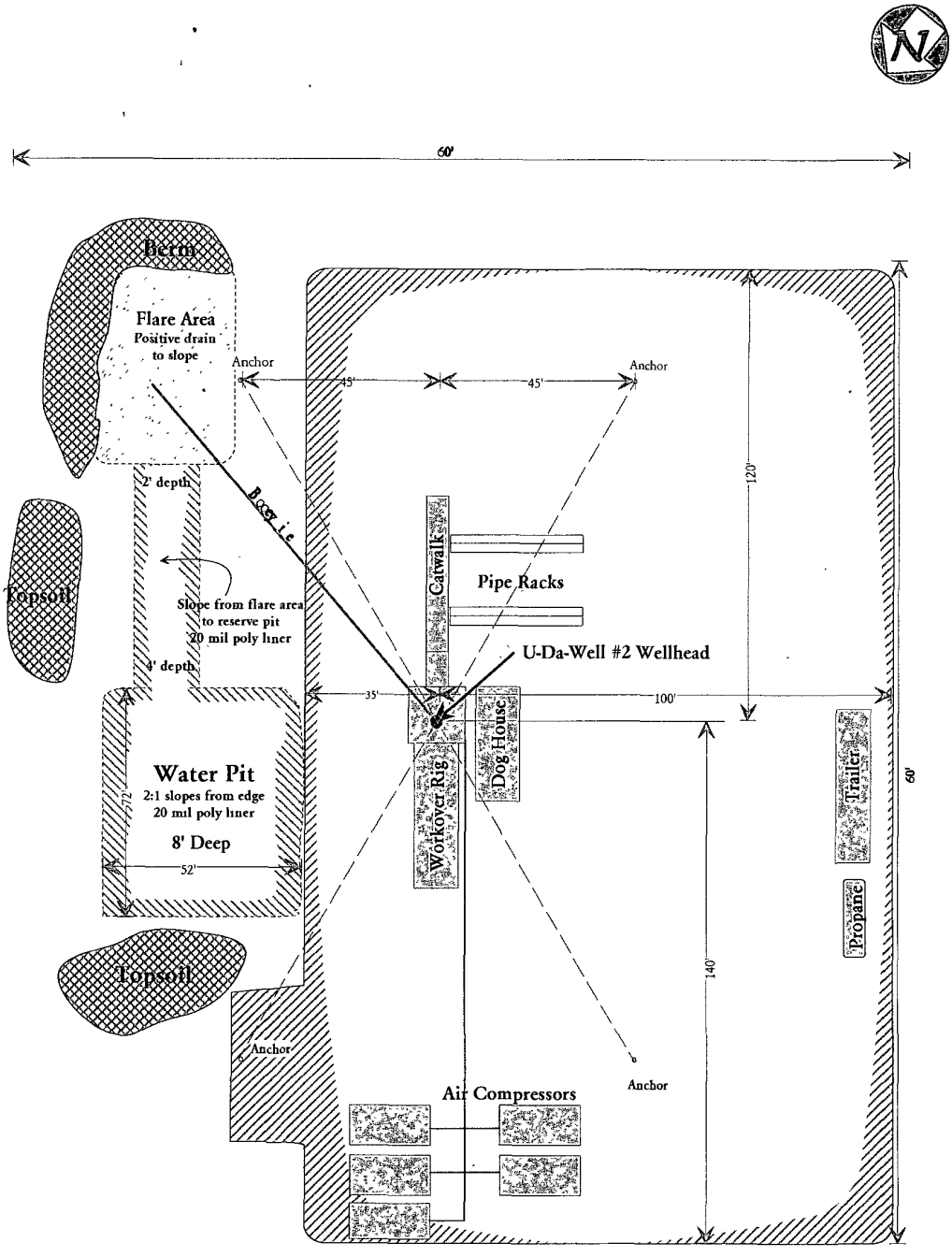
MERRION

Merrion Oil & Gas Corporation
Location Layout
U-Da-Well #2
By: TSF Date: 21-AUG-2008



U Da Well #2 Siting Criteria

1. Ground water is not less than 50 ft below the bottom of the temporary pit. Ground water is greater than 100 ft below the bottom of the temporary pit.

2. The temporary pit is not within 300 ft of a continuously flowing water course, or 200 ft of any other watercourse, lakebed, sinkhole, or playa lake (measured from ordinary high water mark). See attached topographic map and visual inspection certification of the location and area around the subject well.

3. The temporary pit is not within 300 ft from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. See the attached satellite image and visual inspection certificate of the location and area around the subject temporary pit.

4. The temporary pit is not 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. See attached NM Office of the State Engineer iWaters database search and visual inspection certification of the location and area around the subject temporary pit.

5. The temporary pit is not 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. See attached topographic map of the location and area around the subject temporary pit.

6. The temporary pit is not within 500 feet of a wetland. See attached satellite and wetland map and visual inspection certification of the location and area around the subject pit.

7. The temporary pit is not within the area overlying a subsurface mine. See the attached Mine, Mills and Quarry map of New Mexico (New Mexico, EMND 2008) showing the location and area around the subject pit.

8. The temporary pit is not located within an unstable area. See the attached topographic map of the location and area around the subject temporary pit.

9. The temporary pit is not located within a 100-year floodplain area. See the attached FEMA map of the 100 year floodplain showing the location and area around the subject pit.

U Da Well #2 S2, T31N, R08W Hydrogeologic Data

U Da Well #2 is located on State land near the Navajo Reservoir in the San Juan structural basin in San Juan County, New Mexico. The region is a northwest-trending asymmetric structural depression. The basin merges gradually into adjacent depressions or uplifts. The structural boundaries principally consist of large, elongate domal uplifts; low marginal platforms; and abrupt monoclines.

A records search of the NM office of the State Engineer- iWaters database was conducted for the T31N-32N, R08W (iWaters report attached). The closest water well is located in S24, T31N, R8W which is 7.39 miles from the current well location. The well was drilled to a depth of 465', the top of the water was reported at 390'. The water for this well is used for domestic purposes and no other information was available. S35, T32N, R8W which is 3,690.8 ft from the current location, a well was drilled to a depth of 300', the top of the water was reported at 300'. The water for this well is used for sanitary in conjunction with a commercial use.

The San Jose, Nacimiento, and Animas formation are a source of water for public-supply, commercial, private-domestic, and livestock use where water quality is suitable. The closest altitude of the potentiometric surface ground water to this location is 5987'. Water in the San Jose, Nacimiento, and Animas formations occurs under both water-table and artesian conditions. Recharge to the aquifer is from infiltration of precipitation and stream flow on outcrops and from vertical upward leakage of water from underlying units.

GEOLOGY

The ***Animas*** formation crops out principally inside the northern margin of the central basin. The Animas is present only in about the northern one-third of the basin, mainly in Colorado; it does not occur south of the line that extends from Dulce, New Mexico to the La Plata River valley near the New Mexico-Colorado State line.

The ***Nacimiento*** formation crops out in a broad band inside the southern and western margins of the central basin, and in a narrow band along the west face of the Nacimiento uplift. The Nacimiento is a nonresistant unit and typically erodes to low, rounded hills or forms badlands topography. The Nacimiento formation occurs only in approximately the southern two-thirds of the basin where it conformably overlies and intertongues with the Ojo Alamo Sandstone. Along a line from Dulce, New Mexico to the La Plata River valley near the New Mexico-Colorado State line, the Nacimiento formation grades laterally into the main part of the Animas Formation thus, in this area the two formations occupy the same stratigraphic interval. Strata of the Nacimiento formation were mainly deposited in lake beds in the central basin area with lesser deposition in stream channels. Total thickness of the Nacimiento formation ranges from about 500' to 1300'.

The ***San Jose*** formation occurs in New Mexico and Colorado and its outcrop forms the land surface over much of the central basin area. It overlies the Nacimiento formation in the area generally south of the State line, and overlies the Animas formation in the area generally north of the State line. The San Jose formation was deposited in various fluvial type environments. In general the unit consists of an interbeded sequence of sandstone siltstone and variegated shale, the sandstones are buff to yellow and rusty-colored cross bedded very fine to coarse grained arkose, which are locally conglomeratic and contain abundant silicified wood. Thickness of the San Jose formation generally increases from west to east, a reported maximum thickness of 2400' in the east central part of the basin, and a reported a range of from about 200' in the west and south to almost 2700' in the center of the structural basin.

Reference:

HA-720A Hydrogeology of the San Jose, Nacimiento, and Animas formations in the San Juan structural basin, New Mexico, Colorado, Arizona, and Utah, Levings, G. W.; Craigg, S. D.; Dam, W. L.; Kernodle, J. M.; Thorn, C. R., 1990, USGS, atlas format. (*1,000,000 and 2,000,000 scale*)

Philana Thompson

From: Philana Thompson
Sent: Thursday, August 28, 2008 1:06 PM
To: 'dtise@slo.state.nm.us'
Subject: Surface Owner Notification

The following temporary pit will be closed on-site. Per the new OCD Pit Rule #17, we are required to notify the surface owner. Please feel free to contact me at any time if you should have any questions or concerns. Thank you ;-)

If you are not the person these notifications should be directed to please let me know ;-)

Philana Thompson
Merrion Oil & Gas
Regulatory Compliance Specialist
pthompson@merrion.bz
505-324-5336

Merrion Oil & Gas Corp
Pit Design and Construction Plan
Cavitation

In accordance with Rule 19.15.17 the following information describes the design and construction of temporary pits on Merrion Oil & Gas Corp. (MOG) locations. This is MOG's standard procedure for all temporary pits for cavitation purposes. A separate plan will be submitted for any temporary pit which does not conform to this plan.

General Plan:

1) MOG will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2) Prior to construction of the pit, topsoil will be stockpiled in the construction zone for later use in restoration. This material will not be stored with in 300 ft. of a continuously flowing water course, or 200 ft of any other significant water course or lake bed, sinkhole, or playa lake.
3) MOG currently has a well sign on location that lists the following: the operator on record as the operator; the location of the well site by UL, S, T, R; and emergency telephone numbers. The location is signed in accordance with rule 19.15.3.103 Sign on wells.
4) MOG shall construct all new fences utilizing 48" steel mesh field-fence (hog wire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
5) MOG will construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
6) MOG shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot.
7) Pit walls will be walked down by a crawler type tractor following construction.
8) All temporary pits will be lined with a 20-mil, string reinforced, HDPE liner, complying with EPA SW-846 method 9090A requirements.
9) Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
10) All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
11) MOG will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. MOG will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. MOG will minimize the number of field seams in corners and irregularly shaped areas.
12) The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
13) The pit shall be protected from run-off and/or run-on by constructing and maintain diversion ditches around the location or around the perimeter of the pit in some cases.
14) **The volume of the pit shall not exceed 10 acre-feet, including freeboard.**
15) **Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.**
16) **The lower half of the blow pit (nearest lined pit) will be lined with the same 20 ml liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11.F.11.**
17) **MOG will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.**

Merrion Oil & Gas Corp
Maintenance and Operating Plan
Cavitation

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of temporary cavitation pits on Merrion Oil & Gas Corp. (MOG) locations. This is MOG's standard procedure for all temporary pits for cavitation purposes. A separate plan will be submitted for any temporary pit which does not conform to this plan.

General Plan:

1) MOG will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2) MOG will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed of at *Pretty Lady 30 11 34 #1 permit #SWD-1034*.
3) MOG will not discharge or store any hazardous waste in any temporary pit.
4) MOG shall remove any liquids from the temporary pit used for cavitation within 48 hours after completing cavitation. MOG may request and receive additional time to remove the liquids from the temporary pit used for cavitation if the MOG demonstrates to the Aztec OCD district office's satisfaction that it is not feasible to access the location with 48 hours.
5) If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then MOG shall notify the Aztec OCD office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
6) If a leak develops below the liquid's level, MOG shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. MOG shall notify the Aztec OCD office by phone or email within 48 hours of the discovery for leaks less than 25 bbls. For discovery of leaks greater than 25 bbls, MOG shall notify the Aztec OCD office as required to Subsection B of 19.15.3.116 NMAC within 24 hours of discovery. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's environmental bureau chief.
7) The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
8) The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
9) MOG shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored on-site until closure of the pit.
10) Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
11) MOG will maintain the temporary pit free of miscellaneous solid waste or debris.
12) During drilling or workover operations, MOG will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the MOG pit tracking system. MOG will file this log with the Aztec OCD office upon closure of the pit.
13) After drilling or workover operations, MOG will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored in MOG's office electronically and will be filed with the Aztec OCD office upon closure of the pit.
14) MOG shall maintain at least two feet of freeboard for a temporary pit.
15) MOG shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig.
16) MOG shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. MOG may request additional time to remove liquids from the Aztec OCD office if it is not feasible to remove liquids within 48 hours.

Merrion Oil & Gas Corp
Closure Plan for Cavitation

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary cavitation pits on Merrion Oil & Gas Corp. (MOG) locations. This is MOG's standard procedure for all temporary pits utilized for cavitation. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to the OCD within 60 days of closure. Closure reports will be filed on C-144 and incorporate the following:

- Details of Capping and Covering, where applicable.
- Plot Plan (Pit diagram)
- Inspection reports
- Sampling results
- C-105
- Copy of deed notice will be filed with County Clerk

General Plan:

1) All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.
2) The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
3) The surface owner was notified prior to on-site burial of MOG's closing of the temporary pit as per the approved closure plan using email notification, email notification is attached.
4) Within 6 months of the Rig off status occurring MOG will ensure that temporary pits are closed, re-contoured, and re-seeded.
5) Notice of closure will be given to the Aztec OCD office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
   I. Operator's name
   II. Location by UL, S, T and R. Well name and API number.
6) Liner of temporary pit shall be removed above the "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "ALL" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
7) Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
8) A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	~~*(DGW >50 & <100)* 500~~ *(DGW >100)* 1000

9) A five point composite sample will be taken from the cavitation pit pursuant to 19.15.17.13 (B)(1)(b)(i) in order to assure there has not been any type of release.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500

10) Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails MOG will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
11) During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.
12) Dig and haul material will be transported to Envirotech and/ or IEI.
13) Re-contouring of location will match fit, shape, line, form and texture of the surroundings. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with a smooth surface, fitting the natural landscape.
14) Notification will be sent to the OCD when the reclaimed area is seeded.
15) MOG shall see the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Type	Variety or Cultivator	PLS/A
Western Wheatgrass	Arriba	3.0
Indian Ricegrass	Paloma or rimrock	3.0
Slender Wheatgrass	San Luis	2.0
Crested Wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS)= Purity X Germination/100. Two lost of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)
Purity 50 percent
Germination 40 percent
Percent PLS 20 percent
5lb. bulk seed required to make 1lb. PLS

Source No. two (better quality)
Purity 80 percent
Germination 63 percent
Percent PLS 50 percent
2lb. bulk seed required to make 1lb. PLS

16) The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the well pad are abandoned. The operator's information will include the following:

I. Operator name
II. Lease name
III. Well name and number
IV. Unit number
V. Section
VI. Township
VII. Range
VIII. An indicator that the marker is an onsite burial location

Pit Inspection Form

Unit Letter: B Section: 2 Township: 31N Range: 8W

County: San Juan

Location Name: U DA Well #2

Number of wells to the pit: 1

Total daily volume (in barrels) to the pit: _____

Pit Type:

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: 1140 bbl Dimensions: L 80 x W 40 x D 8

Visual Inspection:

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)

Yes ☐ No ☒

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

Yes ☐ No ☒

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

Yes ☐ No ☒

within 500 feet of a wetland

Comments: _____

CERTIFICATION

I hereby certify that the information submitted is true and correct to the best of my knowledge and belief.

Signature: C. Carl Merilatt Title: Production Foreman

Printed Name: C. Carl Merilatt Date: 9-8-08

E-mail Address: Cmerilatt@merrion.bz

A pit is defined as any below grade or surface feature which receives any materials other than fresh water.