10.10.11	10/26	WVJ	10.10.11	TYPE SWD	pTGW 1128366638

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

RECEIVED OCDS 2011 OCT 11 P 1:22

Mesquite SWD 96168
Cotton Draw Unit Com #66
30-025-22024

ABOVE THIS LINE FOR DIVISION USE ONLY

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX **X** SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ❑ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] **X** Offset Operators, Leaseholders or Surface Owner

[C] **X** Application is One Which Requires Published Legal Notice

[D] **X** Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kay Havenor	Kay Havenor	Agent	10/3/2011
Print or Type Name	Signature	Title	Date

KHavenor@georesources.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance __X__Disposal _____Storage
Application qualifies for administrative approval? __X__Yes _____No

II. OPERATOR: Mesquite SWD, Inc.

ADDRESS: P.O. Box 1479 Carlsbad, NM 88221

CONTACT PARTY: Kay Havenor PHONE: 575-626-4518

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes __X__No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Kay Havenor TITLE: Agent

SIGNATURE: Kay Havenor DATE: 10/3/2011

E-MAIL ADDRESS: KHavenor@georesources.com 575-626-4518

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Mesquite SWD, Inc. OGRID 161968

WELL NAME & NUMBER: Cotton Draw No. 66

WELL LOCATION: 2080' FNL & 760' FWL E 10 25S 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

See attached well diagram

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-½" Casing Size: 13-⅜" 48#

Cemented with: 725 sx. ***or*** _____ ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12-¼ Casing Size: 10-¾" 45.5#

Cemented with: 2050 sx. ***or*** _____ ft³

Top of Cement: NR Method Determined: _____

Production Casing

Hole Size: 8-¾" Casing Size: 7"

Cemented with: 1400 sx. ***or*** _____ ft³

Top of Cement: Surface Method Determined: Circulated

Injection Interval

Perf 4950' - 6904'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" J-55 Lining Material: Fiberglass coated

Type of Packer: Lok-Set

Packer Setting Depth: Approx 4900 ft

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____Yes X No,

   If no, for what purpose was the well originally drilled? Morrow test

2. Name of the Injection Formation: Delaware Bell Canyon Fm and Cherry Canyon Fm.

3. Name of Field or Pool (if applicable): _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

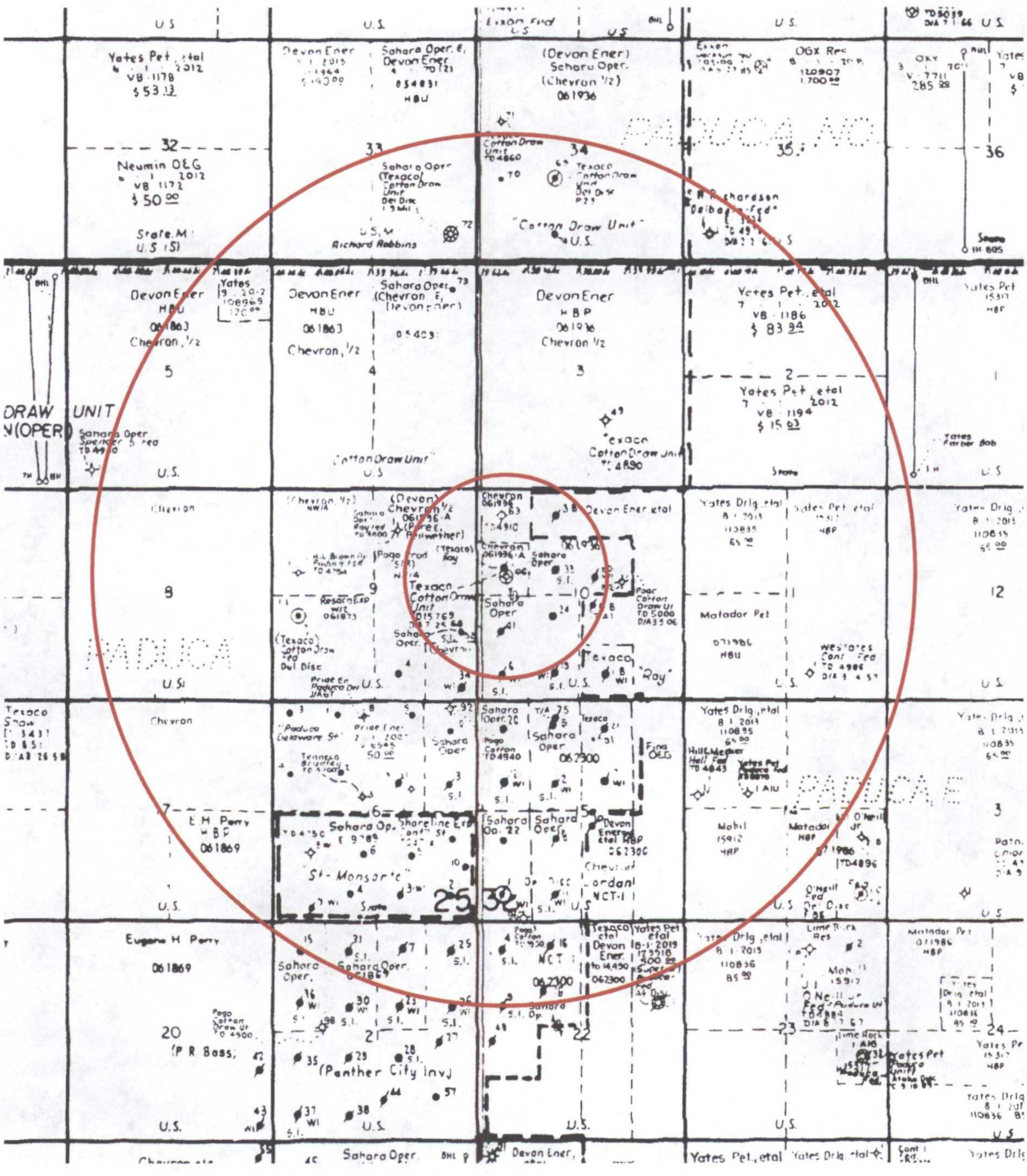
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Productive and depleted wells east and south in overlying Bell Bell Canyon, and P&A producers to north, east, south and southwest in the AOR.

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item V:

Area of Review
½ Mile AOR and 2 Mile Radius



Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item VI: Data on wells in AOR.

All wells in AOR that penetrate the proposed disposal interval:

API	WELL_NAME	STATUS	SEC	TWNSP	RANGE	FTG	NS	FTG	EW	OCD	OPERATOR	LAND	WELL	PLUG_DATE	SPUD_DATE	ELEVGL	TVD
3002522024	COTTON DRAW UNIT 066	Plugged	10	25S	32E	2080	N	760	W	E	TEXACO EXPLORATION & PROD	F	O	25-Jul-68	20-Feb-67	3461	15769
3002537598	COTTON DRAW UNIT 102	TA	10	25S	32E	2210	N	1675	E	G	OXY USA INC	F	O		20-Feb-06	3462	5000

Item VI(a): Construction of wells in the AOR that penetrate the proposed disposal zone:

1. 30-025-22024 Texaco Exploration & Production, Inc Cotton Draw Unit #66, Unit F-Sec. 10-T25S-R32E Spudded 2/20/1967. 17½" hole set 13⅜" 48# H-40 set @604' w/725 sx circ to surface. 12¼" hole set 10¾" 45.5# @4,980' w/stage-1=850 sx +stage-2=1,200 sx TOC NR. 8¾ hole set 7⅝" 33.7# P-110 @12,913' w/900 sx then 1105 sx thru @DV 4,806', TOC 3,820' (TS). DO to TD 15,769'. Set 5½" liner 15,769' to 12,538' w/350 sx. PBTD 15,722'. Perf 5 JSPF 15086-15,102. 2 JSPF 14,682'-15,008'. NS. Perf 2 JSPF 14,826'-14,838' & 14,692'-15,008' w/NS. Re-perf 2 JSPF 15,008'-15,032', 14,997'-15,002',14,962'-14,997'. Acid /w total 11,000 gal 15% + 460 bbls gelled brine w/800 # sand. NS. TA 9/9/1967. Pulled 3½" tbg. CIBP in 7⅝" @12,250' w/ 40 sx Class C 12,450'-12,250'. Loaded hole w/inhibited mud. Spotted 20 sx in 7⅝" @80' to surf. P&A 7/25/1968.

2. 30-025-37598 OXY USA, Inc, Cotton Draw Unit #102, Unit G-Sec. 10-T25S-R32E Spudded 2/20/2006. 12¼" hole set 8⅝" 24# @825' w/500 sx, circ to surface. 7⅞" hole set 5½" 17# @5,000' w/1300 sx, circ to surface. PBTD 4,915'. Frac w/17431 gal w/sand. Completion filed 8/30/2011.

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item VI(b): All known well in the AOR:

API	WELL_NAME	STATUS	SEC	TWNSP	RANGE	FTG	NS	FTG	EW	OCD	OPERATOR	LAND	WELL	PLUG_DATE	SPUD_DATE	ELEVGL	TVD
3002535206	RAY 9 FEDERAL 001	Plugged	9	25S	32E	983	N	1896	E	B	SAHARA OPERATING CO	F	O	22-Feb-01	11-Feb-01	3460	4468
3002508169	COTTON DRAW UNIT 052	Active	9	25S	32E	1650	S	330	E	I	OXY USA INC	F	O		7-Jul-61	3460	4829
3002508168	COTTON DRAW UNIT 034	Plugged	9	25S	32E	330	S	330	E	P	TEXACO EXPLORATION & PROD	F	I	15-Nov-89	10-Feb-61	3457	4850
3002508178	E F RAY B NCT-1 003	Plugged	10	25S	32E	660	N	1980	W	C	DEVON ENERGY PRODUCTION	F	O	10-Feb-01	13-Mar-61	3476	4815
3002520120	COTTON DRAW UNIT 063	Plugged	10	25S	32E	660	N	660	W	D	TEXACO EXPLORATION ;	F	O	22-Sep-95	31-May-63	3476	4910
3002508177	E F RAY NCT 2 002	Plugged	10	25S	32E	1980	N	660	W	E	TEXACO EXPLORATION & PROD	F	O	3-Feb-89	23-Mar-61	2461	4850
3002522024	COTTON DRAW UNIT 066	Plugged	10	25S	32E	2080	N	760	W	E	TEXACO EXPLORATION & PROD	F	O	25-Jul-68	20-Feb-67	3461	15769
3002508174	COTTON DRAW UNIT 033	Plugged	10	25S	32E	1980	N	1980	W	F	POGO PRODUCING CO	F	O	23-Jul-07	14-Feb-61	3462	4791
3002508171	COTTON DRAW UNIT 060	Plugged	10	25S	32E	2145	N	2310	E	G	TEXACO EXPLORATION & PROD	F	I	7-Sep-95	28-Oct-61	3443	4896
3002537598	COTTON DRAW UNIT 102	TA	10	25S	32E	2210	N	1675	E	G	OXY USA INC	F	O		20-Feb-06	3462	5000
3002508172	E F RAY B NCT-1 006	Plugged	10	25S	32E	2309	S	2310	E	J	DEVON ENERGY PRODUCTION	F	O	30-Jul-97	25-Feb-71	3463	4775
3002508176	COTTON DRAW UNIT 024	Plugged	10	25S	32E	1980	S	1980	W	K	POGO PRODUCING CO	F	O	13-Jul-07	14-Jan-61	3459	4787
3002508179	COTTON DRAW UNIT 041	Plugged	10	25S	32E	1650	S	660	W	L	TEXACO EXPLORATION & PROD	F	O	1-Aug-95	14-Mar-61	3420	4825
3002508170	COTTON DRAW UNIT 006	Plugged	10	25S	32E	660	S	660	W	M	OXY USA INC	F	I	16-Oct-09	12-Nov-60	3457	4795
3002508175	COTTON DRAW UNIT 019	Active	10	25S	32E	660	S	1980	W	N	OXY USA INC	F	I		21-Dec-60	3454	4771

3002522024 Target re-entry

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item VII:

1. The maximum injected volume anticipated is 5,000 BWPD. Average anticipated is 3,500 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 990 psi.
4. Sources will be produced water. These will be compatible with known waters in the disposal zones.
5. Water sample analyses from the Pogo Cotton Draw Unit No. 24, Unit K, Sec. 10, T25S-R32E, Lea Co., is shown below, TDS 153,651 mg/l (Source: NM WAIDS):

NM WAIDS

DATA | MAPS | HOME | SCALE | CORROSION

Water Samples for Well COTTON DRAW UNIT 024
API = 3002508176
Formation = DEL
Field = PADUCA

Instructions:

Click — For general information about this sample.

Click — For scale calculation pages (Stiff-Davis or Oddo Tomson methods).

Click — To select this water sample for water mixing. It will lead to the main page, and add the sample ID to the mixing table.

Click 664 — Click the hyperlinked sample number to make a .csv for that sample, or select several check boxes and click Submit for multiple samples

The ions are in (mg/L) units.

	SampleID	T	R	S	SO4	CL	CO3	HCO3	K	Na	Ca	Mg
☑	4392	25S	32E	10	939	152600	null	112	null	null	null	null

☐ SELECT/DESELECT ALL

Submit

New Mexico Tech — PRRC

Disposal water into this well will be chemically compatible with those in the proposed disposal interval.

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item VIII:

Disposal will be into the Delaware Mountain Group (Bell Canyon and Cherry Canyon Formations). The Delaware is comprised predominately of sandstones, and shales. All the Delaware members are interbedded sandstones and shales with occasional dolomite horizons. The lateral transmissivities of the sandstone beds are highly variable and often form selective barriers to the movement of hydrocarbons while allowing down-gradient movement of water. The transmissivity variations are fundamentally due to 1) the very-fine grained nature of the sands and 2) the local percentage of silt and clay. The Delaware sandstone members are typically overlain and underlain by bounding shale, dolomite, and/or silty shale horizons. The depth to the Delaware Mountain Group (top of Lamar) in this well is 4,678'. The top of Brushy Canyon Formation is 7000'. The base of the Delaware (top of Bone Springs Formation) is at 8,600'.

There are no reported fresh, potable or stock water within a 2-mile radius. Records from the New Mexico Office of the State Engineer on 10/1/2011 show no known water wells within the 2-mile radius of the proposed Mesquite SWD disposal well.

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 626670 **Northing (Y):** 3557250 **Radius:** 3300

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian and piedmont deposits of Holocene to middle Pleistocene age. These are underlain by the Permian Rustler Formation and Permian evaporites. The base of the Rustler Formation is 790', top of the banded anhydrite 790', top of salt 3,085', base of salt 4430'. Base of anhydrite/top of Lamar 4,654' (msl -1174'). 7⅝" csg @12,913' cement was circulated to 3,820'.

Item IX:

Acidize open-hole Delaware between 4,950' and approximately 6,904' with 15% HCl as determined initial testing.

Item X:

Logs were run in open hole and are commercially available, but not on file with the OCD.

Item XI:

No water wells located in the 2-mile area surrounding the proposed disposal. Please note Item VIII above.

Item XII:

There is no geological evidence of open faults nor hydrologic connection between the disposal zone and any possible underground sources of protectable water.

Electric logs showing very low resistivities in porous sandstone zones and sample descriptions of the proposed SWD interval reported only one sample with a very slight hydrocarbon show in the Cotton Draw No. 66 . Similar conditions are found in other wells in the greater area. This demonstrates that the commercial potential for oil and/or gas is absent in the portion of the Delaware to be utilized for SWD.

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Plugging diagram of Texaco Cotton Draw Unit No. 66

PLUG AND ABANDON WELL DIAGRAM

API:	3002522024			**KB:**	3480
Operator:	Texaco, Inc			**GL:**	3461
Lease:	Cotton Draw Unit	Well No:	66	Spud date:	February 20, 1967
Location:	Sec 10, T25S-R32E Lea Co., NM			Plugged :	July 25, 1968
Footage:	2080 FNL, 760 FWL			MSL of TD:	-12289

Surface Csg

Size:	13-3/8" 48#
Set @:	604
Sxs cmt:	725
Circ:	Yes
TOC:	Surf
Hole Size:	17-1/2"

Intermediate Csg

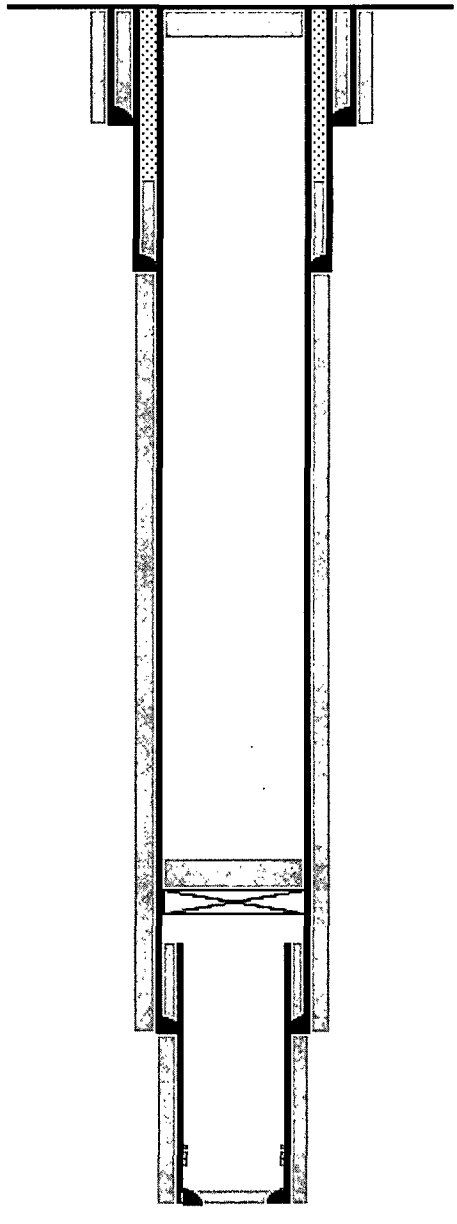
Size:	10-3/4" 45.5# J-55
Set @:	4,980
Sxs cmt:	2050
Circ:	No
TOC:	NR
Hole Size:	12-1/4"

Production Csg

Size:	7-5/8" 33.7# P-110
Set @:	11913
Sxs cmt:	2005
Circ:	No
Hole Size:	8-3/4"

Production Liner

Size:	5-1/2" 26# C-/5
Set @:	12538-15769'
Sxs cmt:	350
Circ:	NR-Calc 45% excess
Hole Size:	Est 6-5/8"



Not to Scale

0
Circ 20 sxs 80' to surface

TOC on 10-3/4" NR
604 13-3/8" 48# H-40

TOC 7-5/8" 3820' TS
B/Salt 4430'
Top Lamar Ls 4653'
4980

Top Brushy Canyon 6995'
Top Bone Springs 8600'

CIBP 12250 w/40 sx 12250-12450
12538 5-1/2" liner w/350 sx

12913 Base 7-5/8" Stage 1: 900 sx, Stage 2: 1105 sx
7-5/8" DV depth NR
Top Penn 13426

Perfs Morrow 14692-15102 (OA)
Dry in tests
15769 PBTD 15722

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Proposed Re-entry and Completion for SWD

API: 3002522024
Operator: Mesquite SWD, Inc
Lease: Cotton Draw #66 Well No:
Location: Sec 10, T25S-R32E Lea Co., NM
Footage: 2080 FNL, 760 FWL

KB: 3480
GL: 3461
Spud date: February 20, 1967
Plugged : July 25, 1968
MSL of TD: -12289

Surface Csg
Size: 13-3/8" 48#
Set @: 604
Sxs cmt: 725
Circ: Yes
TOC: Surf
Hole Size: 17-1/2"

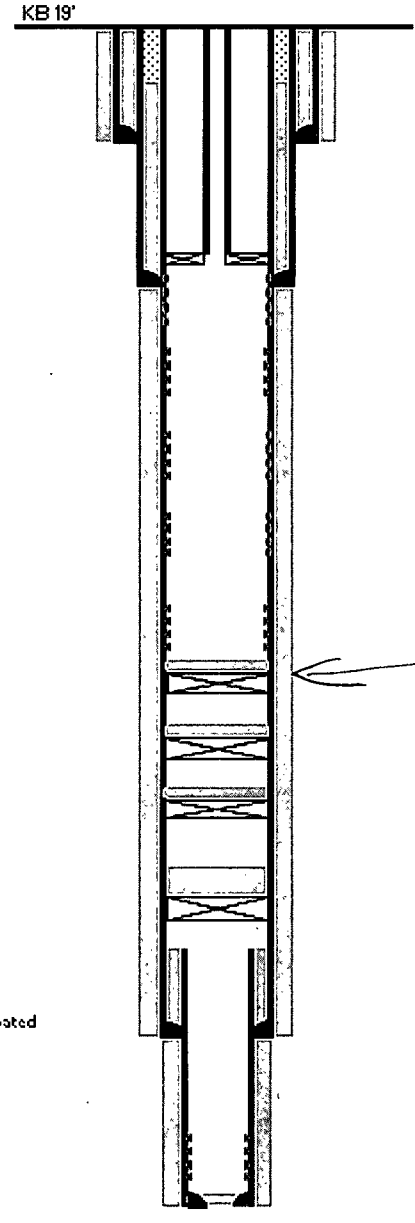
Intermediate Csg
Size: 10-3/4" 45.5# J-55
Set @: 4,980
Sxs cmt: 2050
Circ: No
TOC: NR
Hole Size: 12-1/4"

Production Csg
Size: 7-5/8" 33.7# P-110
Set @: 11913
Sxs cmt: 2005
Circ: No
Hole Size: 8-3/4"

Production Liner
Size: 5-1/2" 26# C-/5
Set @: 12538-15769'
Sxs cmt: 350
Circ: NR-Calc 45% excess
Hole Size: Est 6-5/8"

Tubular requirements (made-up):
4900' 3-1/2" N80 9.3# upset Fiberglass coated
Lok-Set packer or equivalent approx 4900'

Perforate selectively 4950'-6904' (OA)
Acidize OA approx 20,000 gal 15% HCl
Load tubing annulus w/corrosion inhibitor
Complete surface head for disposal



Not to Scale

0
Circ 20 sxs 80' to surface

TOC on 10-3/4" NR
604 13-3/8" 48# H-40

TOC 7-5/8" 3820' TS
B/Salt 4430'
Top Lamar Ls 4653'
4980

CIBP = 200' cmt to 7000'
T/Brushy Canyon
CIBP + 200' cmt to 8600'
T/Bone Springs
CIBP 11804 + 200' cmt
T/Wolfcamp

CIBP 12250 w/40 sx 12250-12450

12538 5-1/2" liner w/350 sx

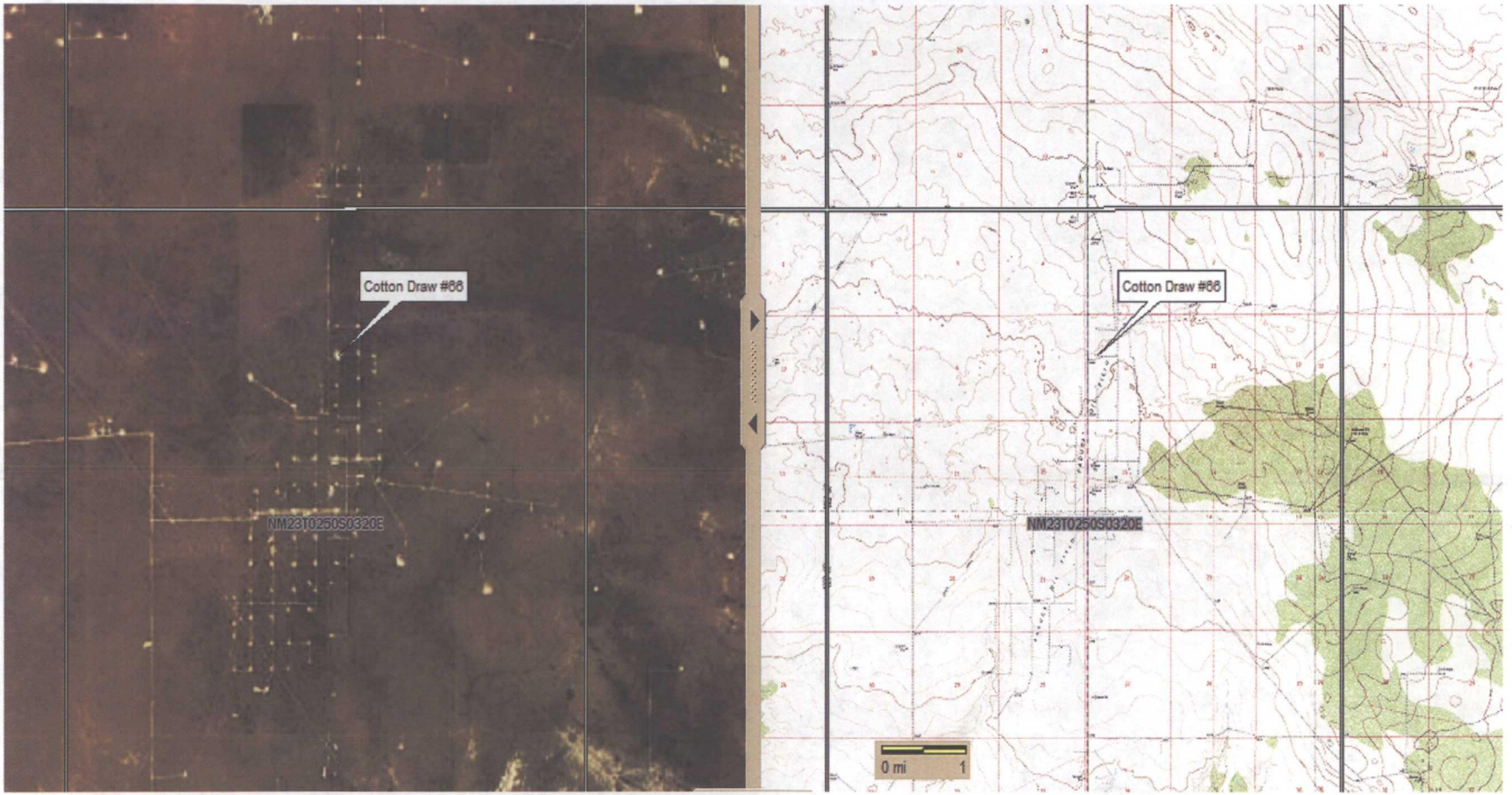
12313 Base 7-5/8" Stage 1: 900 sx, Stage 2: 1105 sx
7-5/8" DV depth NR
Top Penn 13426

Perfs Morrow 14692-15102 (OA)
Dry in tests
15769 PBTD 15722

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

SPOT10 Satellite and Matching Topographic Map



From the junction of NM-128 and Lea Co. CR-1 south 4.8 miles and east 500 feet.

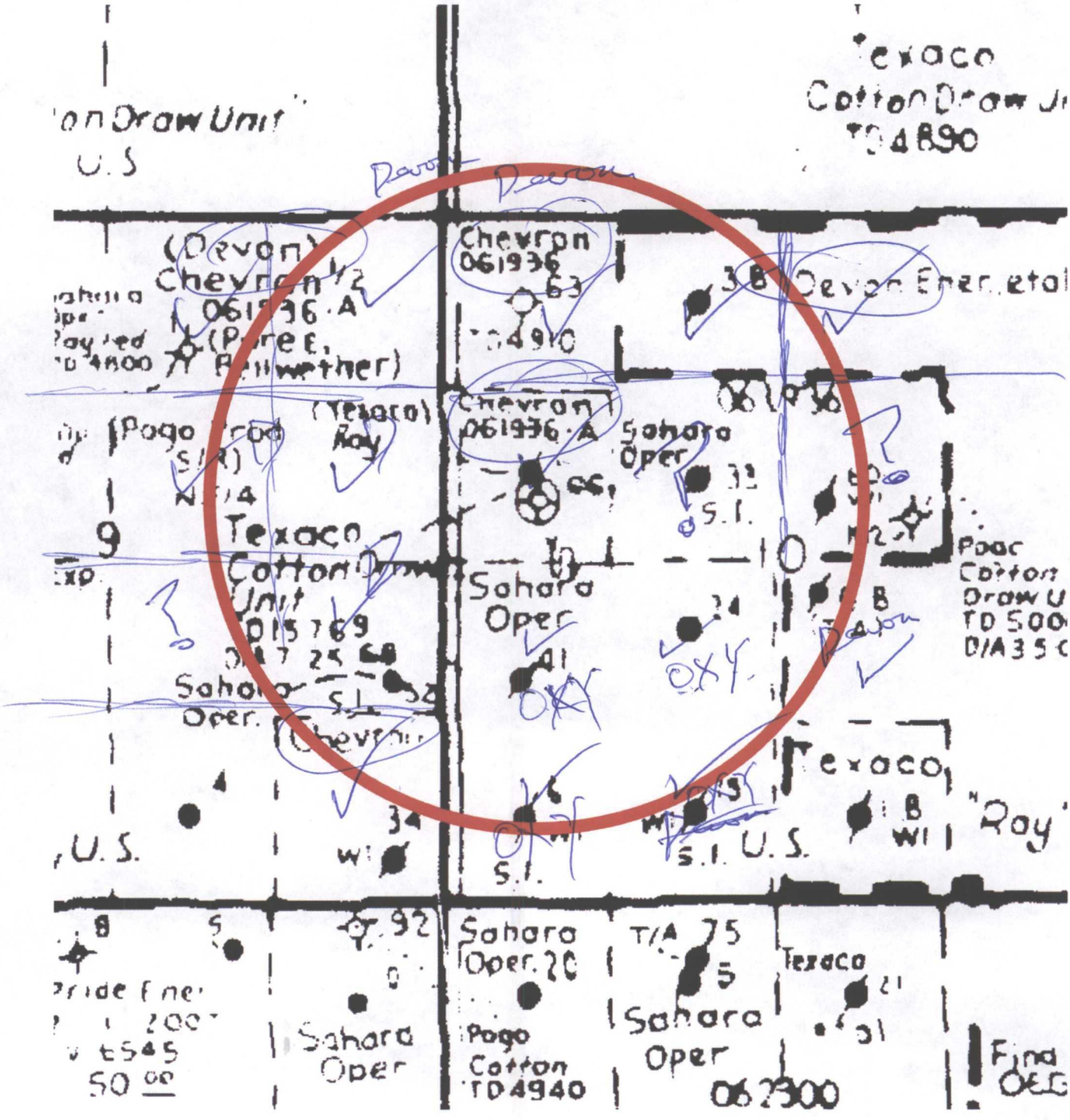
Delorme Xmap6

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Enlarged View of AOR
Centered in Unit H Sec. 22, T25S-R32E
Lea Co., NM

Item V(a):



Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Item XIII:

Surface and Minerals Owner:

Bureau of Land Management
c/o Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220

Operators:

	OCD Units in AOR
Chevron USA, Inc. 15 Smith Rd. Midland, TX 79705	Sec 9, P Sec. 10, D-E
Devon Energy Corp. 20 N. Broadway Oklahoma City, OK 73102	Sec 3, M-N Sec 4, P Sec 9, A-B, G-I, O Sec 10, B-C, J, N-O
OXY USA, Inc. P.O. Box 4294 Houston, TX 77210-4294	Sec 9, H Sec 10, K-N

BLM Surface Lessee

Mr. Jeff Robbins
301 Orla Rd.
Jal, NM 88252

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Legal Notice Publication

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertisting Director of THE LOVINGTON LEADER, a thrice a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of October 4, 2011 and ending with the issue of October 4, 2011.

And that the cost of publishing said notice is the sum of $ 35.01 which sum has been (Paid) as Court Costs.

Joyce Clemens

Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 4th day of October, 2011.

Gina Fort

Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2014

OFFICIAL SEAL
GINA FORT
Notary Public
State of New Mexico
My Comm. Expires 6/30/14

22024

LEGAL NOTICE
Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201, (575) 626-4518, email: KHavenor@pepre-sources.com, is seeking approval from the New Mexico Oil Conservation Division to re-enter the Texaco, Inc. Cotton Draw Unit Com No. 66 well API: 30-025-21024, located 2080 feet from the north line and 760 feet from the west line of Section 10, T25S, R32E, Lea County, NM, from the junction of NM-128 and Lea Co. CR-1 south 4.8 miles and east 500 feet, and re-enter for commercial produced water disposal as the Mesquite SWD, Inc. Cotton Draw Unit Com No. 66. The proposed disposal interval is in the Delaware Mountain Group through 7-5/8" casing perforations 4,950 feet to 6,904 feet (OA). Mesquite SWD, Inc plans to dispose of a maximum of 5,000 BWPD at a maximum pressure of 990 psi.

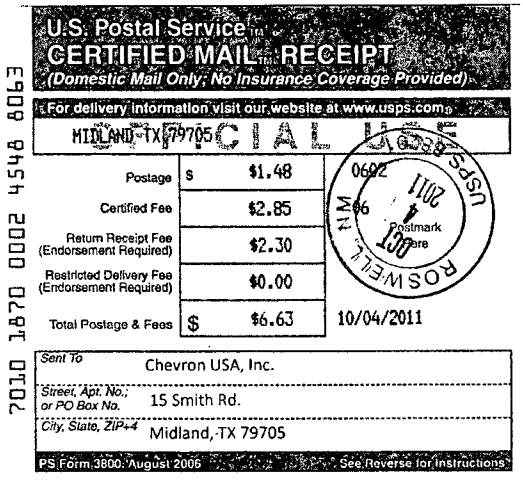
Parties with questions regarding this proposal are urged to contact Kay Havenor at the email address or phone number above. Interested parties must file objections or requests for hearing within 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Lovington Leader October 4, 2011.

Cotton Draw No. 66
2080' FNL & 760' FWL
Sec. 10, T25S-R32E
Lea County, NM

API 30-025-22024

Certified Mail Receipts



U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
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For delivery information visit our website at www.usps.com®
MIDLAND TX 79705 OFFICIAL USE

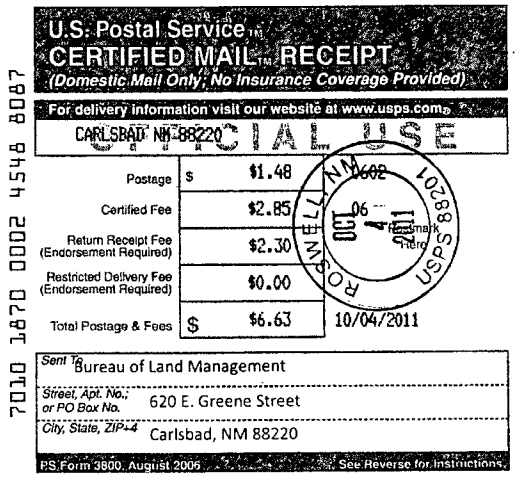
Postage	$ $1.48
Certified Fee	$2.85
Return Receipt Fee (Endorsement Required)	$2.30
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $6.63

0602 ROSWELL NM 88201 OCT 06 2011 Postmark Here USPS
10/04/2011

Sent To: Chevron USA, Inc.
Street, Apt. No.; or PO Box No.: 15 Smith Rd.
City, State, ZIP+4: Midland, TX 79705

PS Form 3800, August 2006 See Reverse for Instructions

7010 1870 0002 4548 8063



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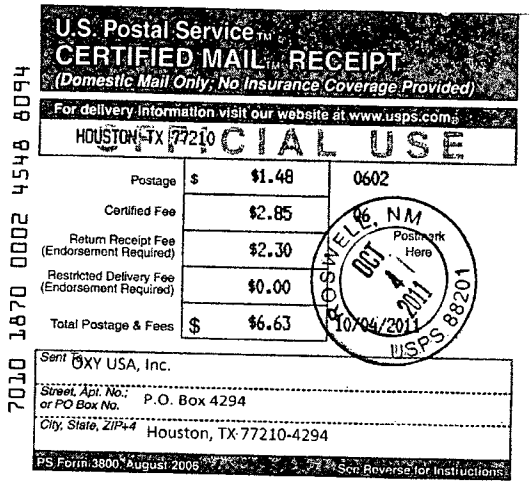
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $6.63

0602 ROSWELL NM 88201 OCT 06 2011 Postmark Here USPS
10/04/2011

Sent To: Bureau of Land Management
Street, Apt. No.; or PO Box No.: 620 E. Greene Street
City, State, ZIP+4: Carlsbad, NM 88220

PS Form 3800, August 2006 See Reverse for Instructions

7010 1870 0002 4548 8087



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HOUSTON TX 77210 OFFICIAL USE

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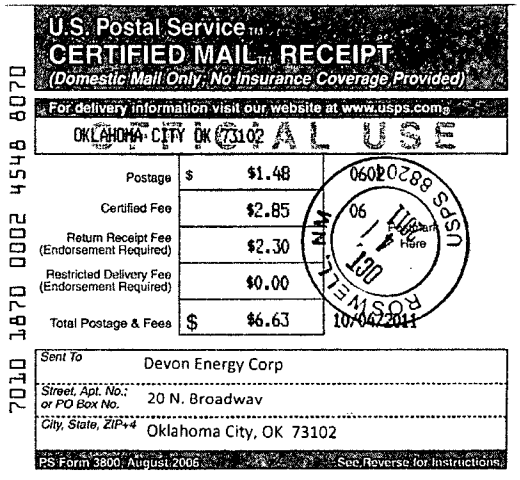
Certified Fee	$2.85
Return Receipt Fee (Endorsement Required)	$2.30
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $6.63

0602 ROSWELL, NM 88201 OCT 4 2011 Postmark Here USPS
10/04/2011

Sent To: OXY USA, Inc.
Street, Apt. No.; or PO Box No.: P.O. Box 4294
City, State, ZIP+4: Houston, TX 77210-4294

PS Form 3800, August 2006 See Reverse for Instructions

7010 1870 0002 4548 8094



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OKLAHOMA CITY OK 73102 OFFICIAL USE

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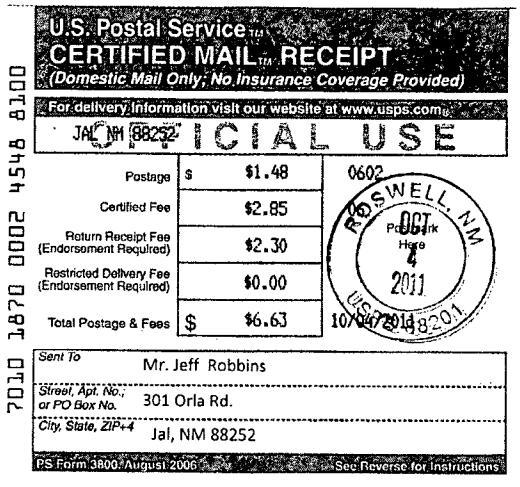
Return Receipt Fee (Endorsement Required)	$2.30
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $6.63

0602 ROSWELL NM 88201 OCT 06 2011 Postmark Here USPS
10/04/2011

Sent To: Devon Energy Corp
Street, Apt. No.; or PO Box No.: 20 N. Broadway
City, State, ZIP+4: Oklahoma City, OK 73102

PS Form 3800, August 2006 See Reverse for Instructions

7010 1870 0002 4548 8070



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JAL NM 88252 OFFICIAL USE

Postage	$ $1.48
Certified Fee	$2.85
Return Receipt Fee (Endorsement Required)	$2.30
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $6.63

0602 ROSWELL, NM 88201 OCT 4 2011 Postmark Here USPS
10/04/2011

Sent To: Mr. Jeff Robbins
Street, Apt. No.; or PO Box No.: 301 Orla Rd.
City, State, ZIP+4: Jal, NM 88252

PS Form 3800, August 2006 See Reverse for Instructions

7010 1870 0002 4548 8100

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	1		***Operator, Well, and Contact info:***
	2	II	Name of person submitting the application: Kay Havenor Other Contact?
	3	II	Did you Include a contact Email in the application? Yes and Mailing Address? Yes and Phone? Yes
	4	II	Operator Name: Mesquite SWD, Inc. OGRID Num: 161968
	5		RULE 5.9 Compliance..... Number of Inactive Wells 0 vs Total Wells Operated 21 .... Is financial assurance required on any well? No Violation
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC? No
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits?
	8	III	Well Name: Cotton Draw #66
	9	III	API Num: 30-025-22024 Spud Date: 2/20/1967
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? Yes
	11	III	Proposed well...Footages 2080' FNL & 760' FWL Unit E Sec 10 Tsp 25S Rge 32E County Lea
	12		General Location (i.e. Y miles NW of Z): From Jct NM-128 & Lea CR-1 south 4.8 miles and east 500'
	13		Current Well Status: P&A
	14	I	General Summary of Planned Work to Well: Re-enter, CO to approx 12,000', set 3 CIBP + cmt plugs PB to 7,000'. Perf 4950-6904 (OA). Perf and acidize.
	15		***INTERVAL TOP and BOTTOM:***
	16	IIIB.(2)	Proposed disposal Top Depth: 4950' Formation Name: Bell Canyon (include Member Names for Delaware or Mesaverde)
	17	IIIB.(2)	Proposed disposal Bottom Depth: 6904' Formation Name: Cherry Canyon
	18	IIIB.(2)	Is the disposal interval OpenHole? or Perfed? Perfs in csg 4950'- 6904'
	19	IIIB.(2)	What will be the disposal tubing size OD? 3-1/2" Packer Seat, Feet: approx 4900'

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	20	VII	What max surf inj. psi are you proposing? __990_____ If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?_____
	21		***FRESH WATERS:***
	22	VIII	Depth to bottom of Fresh Waters:___less than _85' if present_____Formation Name(s)?____Quaternary alluvium_____
	23	XI	Any Fresh Water Wells Within 1 Mile? __No_____ If so, did you attach an analysis from these Wells? _____
	24		Are all "Fresh" waters isolated with Casing and Cement? __Yes_____ ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters?___Yes Item XII_____
	26		***WASTE WATERS:***
	27	XIV	Will this be a Lease Only disposal well? _____ or only used for the Operator's own waste needs? _____or Commercial Disposal? __Yes_____
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common...? Delaware Brushy Canyon - Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters?__Yes_____ Did you include waste water analysis? ____Yes, Delaware water_____
	30		***AT PROPOSED WELL....INSITU WATERS AND HYDROCARBON POTENTIAL:***
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval?____Yes_____
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water? and did you include a Rate-Time plot of this depleted interval?_____
	33	VII	Insitu water analysis Included?__Yes____Is the salinity within the disposal interval more than 10,000 mg/l of TDS?__Yes_____or how will you determine this insitu water salinity?
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? ____Yes, on P&A diagram_____
	35		What is the top _main salt 3085'_____and bottom __4430'_____ of the Salado Salt (....If this well is in the Southeast and the Salt is present)
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site? __No, but are commercially available__If logs not there, please send_____
	37	IIIA.	Are the wellbore diagrams for this well included in the Application.....Before Conversion? Yes___ and After Conversion?__Yes__

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram? Yes
	39		***NOTICE:***
	40	XIV	Date of the Newspaper Notice in the County: 10/4/2011
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? Yes
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? Yes, in Were they all formally noticed? Yes
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well? Yes .....If so, have you also noticed all the shallower interests of the intent to use the well for disposal?
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? No ..... If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)? BLM Was that party formally noticed? Yes
	46		***Area of Review:***
	47	V	Did you include a map identifying all wells within 2 miles? Yes
	48	VI	Did you include a list of all AOR wells? Yes Is the list available to be emailed (if requested) in spreadsheet format? Yes - Included in Item VI list
	49	VI	Does this list identify all wells penetrating (at least the top of) the disposal interval within 1/2 mile of the proposed well? Yes
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? Yes
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? 2 How many of these are Plugged/Dry and Abandoned? 1 P&A
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the roposedwell? Yes
	53	VI	Do all reported cement tops describe how that "top" was determined? If Available If you calculated any tops, what fillup efficiency factor did you use?
	54	VI	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? Yes, when info was available
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No ...or in the formations directly above or below? No
	57		***Administrative or Hearing:***
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? is it "gas" or "oil"?
	59		.... NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". These types of applications must be processed at an examiner hearing.
	60		Any other Issues..?

Jones, William V., EMNRD

From: Kay Havenor [khavenor@georesources.com]
Sent: Friday, October 28, 2011 9:40 AM
To: Jones, William V., EMNRD
Subject: Re: Disposal application from Mesquite SWD, Inc.: Cotton Draw #66 30-025-22024 Bell and Cherry Canyon

Will,

Sorry I did not specifically spell that ownership out. OXY is the owner/operator of the acreage you described below.

Mesquite will have no problem with a bond log or a potential injection survey.

Thank you.

Kay

At 09:14 AM 10/28/2011, you wrote:

Hello Kay,

Most of the lands were covered by defined owners, but I had trouble determining the owners of some.
Would you please check to see who owns the Delaware oil and gas rights within:
a. Unit letter J (NW/4 SE/4) of Section 9
b. Unit letters F and G of Section 10

The well may need a bond log run prior to perforating to see where the cement top is located (below the cement stage tool). Apparently cement did not circ below the 4806 foot DV tool.

The proposed interval covers almost 2,000 feet. Depending on what the cement coverage is after the bond log, we may ask Mesquite to run a one-time injection survey.

Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462

Injection Permit Checklist (11/15/2010)

WFX______ PMX______ SWD 1306 Permit Date 10/28/11 UIC Qtr (O(N/D))

\# Wells 1 Well Name(s): Cotton Draw ~~Unit~~ #66

API Num: 30-0 25-22024 Spud Date: 2/20/67 New/Old: O (UIC primacy March 7, 1982)

Footages 2080 FNL/760 FWL Unit E Sec 10 Tsp 25S Rge 32E County LEA

General Location:

Operator: Mesquite SWD, INC. Contact Kay Havenor

OGRID: 161968 RULE 5.9 Compliance (Wells) 0/21 (Finan Assur) ~~OK~~ IS 5.9 OK? OK

Well File Reviewed ✓ Current Status: P&A 2/25/68 old Morrow Test

Planned Work to Well: Re-enter To 12,000', PB To 7,000' Perf ACIDIZE

Diagrams: Before Conversion ✓ After Conversion ✓ Elogs in Imaging File: ?

Well Details:	Sizes Hole.......Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New __Existing ✓ Surface	17 1/2 13 3/8	604'	—	725	CIRC
New __Existing ✓ Interm	12 1/4 10 3/4	4,980'	??	2050 ←	~~?~~ 2 Stage ~~?~~
New __Existing ✓ LongSt	8 3/4 7	12,913'	4806	1400	~~?~~ (3820' TS)
New __Existing ✓ Liner	5 1/2 (12538')	15,769' TD			
New __Existing __ OpenHole					

(Did not CIRC above DV Tool)

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	4678	Lamar	✓
Injection TOP:	4980	Bell C.	Max. PSI 996 OpenHole ___ Perfs ✓
Injection BOTTOM:	6904	Cherry C.	Tubing Size 3 1/2 Packer Depth 4900'
Formation(s) Below	7000' / 8600	Brushy C. / B.S.	✓ ✓

overlying Bell C. is Productive nearby

4980 × .2 = 996

Capitan Reef? ____ (~~Potash?~~ ~~Noticed?~~) [WIPP? ____ Noticed? ____] Salado Top/Bot 3085'-4430' ~~Cliff House?~~

Fresh Water: Depths: <85' Formation QAL Wells? NO Analysis? — Affirmative Statement ✓

Disposal Fluid Analysis? Sources: Commercial Disposal

Disposal Interval: Analysis? ✓ Production Potential/Testing: See XII, only SLIGHT Show

Notice: Newspaper Date 10/4/11 Surface Owner BLM Mineral Owner(s) ?

RULE 26.7(A) Affected Persons: Devon ~~Ell~~ Leased ?

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Wellbore Diagrams? —

.......Active Wells 1 (TA) Repairs? — WhichWells? —

.........P&A Wells 0 Repairs? — Which Wells? —

J of 9 = ?
F, G of 10 = ?

Issues: Run inj Survey w/in 6 months (2000' interval) Request Sent ______ Reply: ______

Run CBL, SQZ if Necessary