UICI - 005

AGUA MOSS LLC

FALL-OFF TEST PLAN

2013

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

Sunco Disposal #1
30-045-28653
Test Plan for Pressure Fall-Off Test (FOT)

Agua Moss, LLC
PO Box 600
Farmington, NM 87499
Attn: Philana Thompson
Phone: 505-324-5336

July 15, 2013

AGUA MOSS, LLC

TEST PLAN FOR PRESSURE FALL-OFF TEST (FOT)

Well Information			
Well:	**Sunco Disposal 1**	**Field:**	Mesaverde SWD
Location:	1595' fnl &1005' fwl S2, T29N, R12W San Juan Co. New Mexico	**Elevations:**	5859' GL 5872' RKB
		Depths:	4706' KB PBTD 4760' KB TD
		Engineer:	J. Ryan Davis (505.324.5335)
API:	30-045-28653	**Date:**	July 15, 2013
Surface Casing:	8- 5/8" @ 209' KB w/ 150sx; Circ to surface	**Production Casing:**	5-1/2" @ 4750' KB w/ 230 sx stage 1, 515 sx stage 2, circ 25 sx to surf, DV tool @ 2244' KB
Tubulars:	2- 7/8" 6.5# EUE (Plastic Coated) @ 4282' KB	**Packer:**	Arrow XL-W retrievable seal bore @ 4282' KB.
Perforations (MV)	4350-4460' KB 2 spf (2000 gals 15% HCL, Frac w/ 100,000# 20/40		
Additional Perforations			
Perforations (MV)	None		

Version 1 – Procedure subject to change based on changing well conditions.

Proposed Test Schedule:

Date	Event	Remarks
Monday, July 29th, 2013	Check conditions and Begin injection	TD, Fill, Restrictions and hang Gauge
Wednesday, July 31st, 2013	End Injection and Begin FOT	Shut-In and monitor
Saturday, August 3rd, 2013	72 hrs	Gradient stops

Test Considerations:

V.1 The triplex pump at the facility is capable of maintaining a constant rate of 3000 bpd against the anticipated injection pressures.

V.2 The injection rate of 3000 bpd will be sufficient to produce valid test data. During normal injection at 3000 bpd the surface pressure build up is approx. 700 psi with a mirrored fall off over a three day period.

V.3 The normal waste liquid will be used during the FOT due to the cost effectiveness and availability.

V.4 The total volume of fluid needed for the FOT is 6,250 bbls.

a) A total of 6,500 bbls will be onsite for the injection interval for the FOT and water will continue to be hauled to facility in the case that more fluid is needed during the injection period.

b) Lowering the Injection rate will be considered if well conditions merit a change or storage of fluid becomes a constraint.

V.5 The gauges will be RIH and the injection period will be a minimum of 50 hrs to ensure radial flow and stabilization. A total of 15 hrs was calculated using the EPA Region 6 UIC Pressure Falloff Testing Guideline design calculations found on pg A-4. The fall off portion will be a minimum of 72 hrs justified by this being the time frame used on the previous FOT.

V.6 There will be adequate storage capacity for waste water for the duration of the FOT.

V.7 There is one offset well completed in the Point Lookout disposal formation. The McGrath #4 is a class II disposal operated by ConocoPhillips approx 1.25 miles to the north west of the Sunco #1. The last injection on the McGrath #4 was March 2013 and the well is currently shut in with injection activity during the FOT very unlikely.

V.8 Crown valve is currently in-place on the Sunco #1 wellhead. The gauges will be RIH through a lubricator prior to the injection period.

V.9 A shut-in valve is located on the injection riser approx 3-feet from the wellhead. This valve can be shut quickly to reduce erratic pressure response and minimize the wellbore storage.

V.10 Prior to the FOT a gauge ring will be run through the tubing to ensure no restrictions in the tubing and slickline will also be used to tag up and determine wellbore fill. Test parameters will be adjusted accordingly or the needed the repairs will be made to remedy the situation.

V.11 Surface readout gauges will not be used in the FOT data collection due to cost and the fact Key performed the 2010 FOT with tandem memory down hole gauges with successful data collection. The gauges used will be latest available technology from Teftiller, Inc which will meet or exceed the pressure range, accuracy and resolution requirements. The gauges will be setup on auto resolution capture based on pressure change. Each gauge will be setup with a different auto resolution range to ensure all data in captured accurately.

V.12 A test log will be kept during the test and submitted with the FOT results. The log will include key events with date and times.

- Gauge ring run
- Tag depth
- Gauge activation
- Gauges on bottom
- Injection start
- Injection stop
- Well isolation
- Pressure stabilization
- End of Fall Off

V.13 Surface pressures will be recorded continuously using a chart recorder during the FOT. If any abnormal surface pressure change occurs the test validity will be questioned and the test will be aborted if deemed invalid.

V.14 The memory gauges being used for the FOT have auto resolution capability that changes the resolution based on rate of pressure change. First gauge will be configured to obtain data every 15 seconds and adjust to every one minute. The second gauge will be configured to obtain data every 30 seconds and adjust to every two minutes. Memory capacity is 35 day and 69 days respectfully. The minimum 15 second resolution was used during the 2010 FOT and proved to be acceptable. The length of the fall off portion is based on the 2010 FOT, 72 hours proved to be adequate.

V.15 The tri-plex injection pump at the facility that is normally used for injection will be used for the FOT. It is a positive displacement pump running at a constant RPM which will ensure constant injection rate during the FOT. A constant injection rate of 3000 bpd will be sufficient to create a 100 psi differential between final injection pressure and shut-in pressure.

Fall Off Test Procedure:

Prepare Well for Fall Off Test

1. Arrange for adequate injection fluid storage
2. Accumulate 6500 bbls of produced water
3. MIRU wireline
4. RIH w/ Gauge ring to SN
5. POOH w/ Gauge ring and PU impression block (or something to run thru SN)
6. RIH tag and record fill depth
7. If no restrictions exist and fill is below the perfs continue on to FOT. Otherwise remediate problem or adjust FOT procedure before continuing.

Conduct Fall Off Test

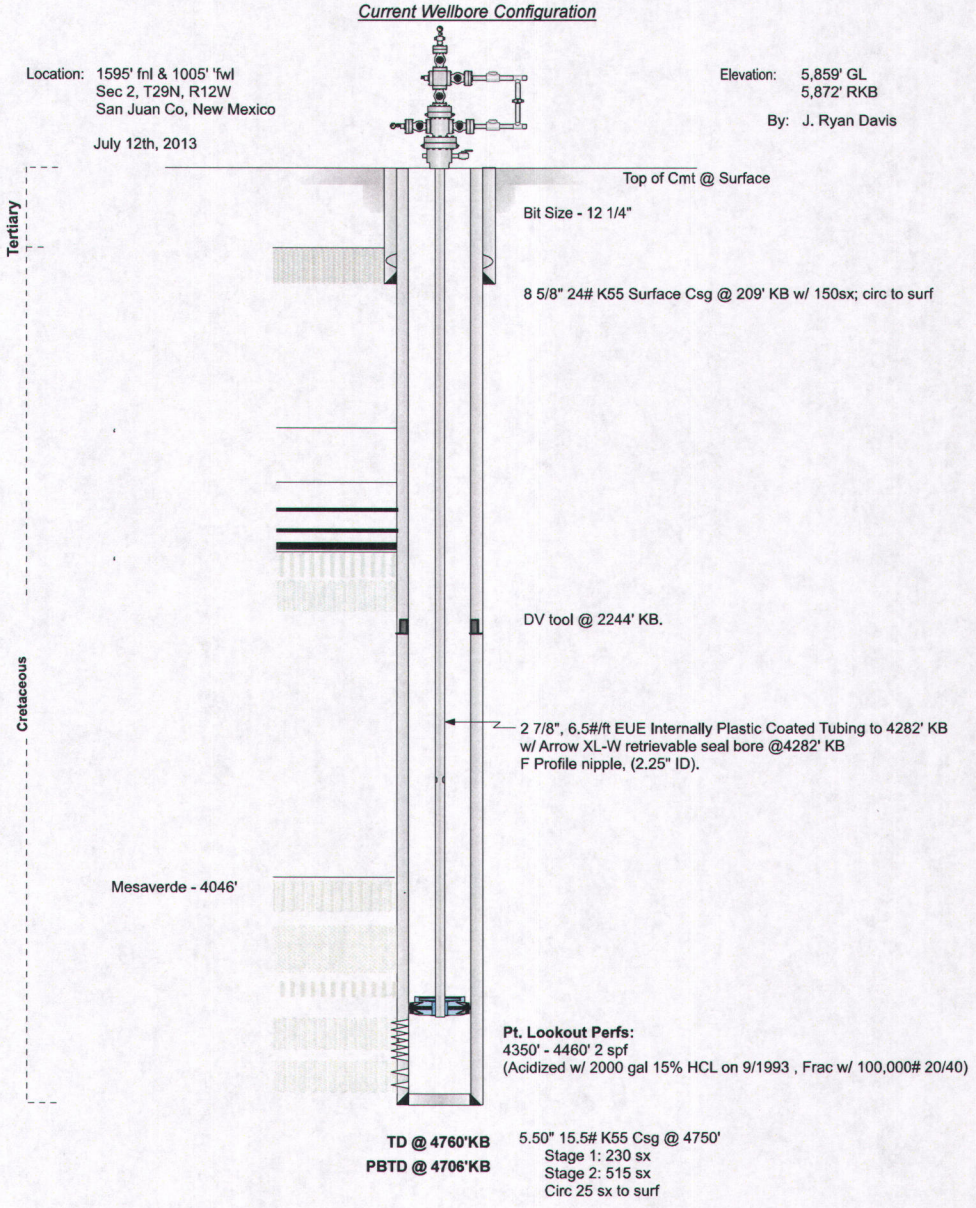
8. POOH pick up pressure gauges
9. RIH and hang gauges off @ 4405' KB
10. Begin injection, (125 bph) 3000 bwpd, Record time
11. Inject for 50 hrs, total of 6250 bbls. Record start and stop time
    a. Ensure injection pressures have stabilized before proceeding
12. S/D injection pump and close valve @ wellhead, Record time
    a. Once surface pressure stabilizes record start time of fall off
13. Record pressure data for 72 hrs, Record start and stop time
14. POOH making gradient stops @ 4000', 3000', 2000', 1000' and surface
15. Secure well and bleed pressure off lubricator
16. R/D wireline
17. Put well back into service for normal operation.

Agua Moss, LLC

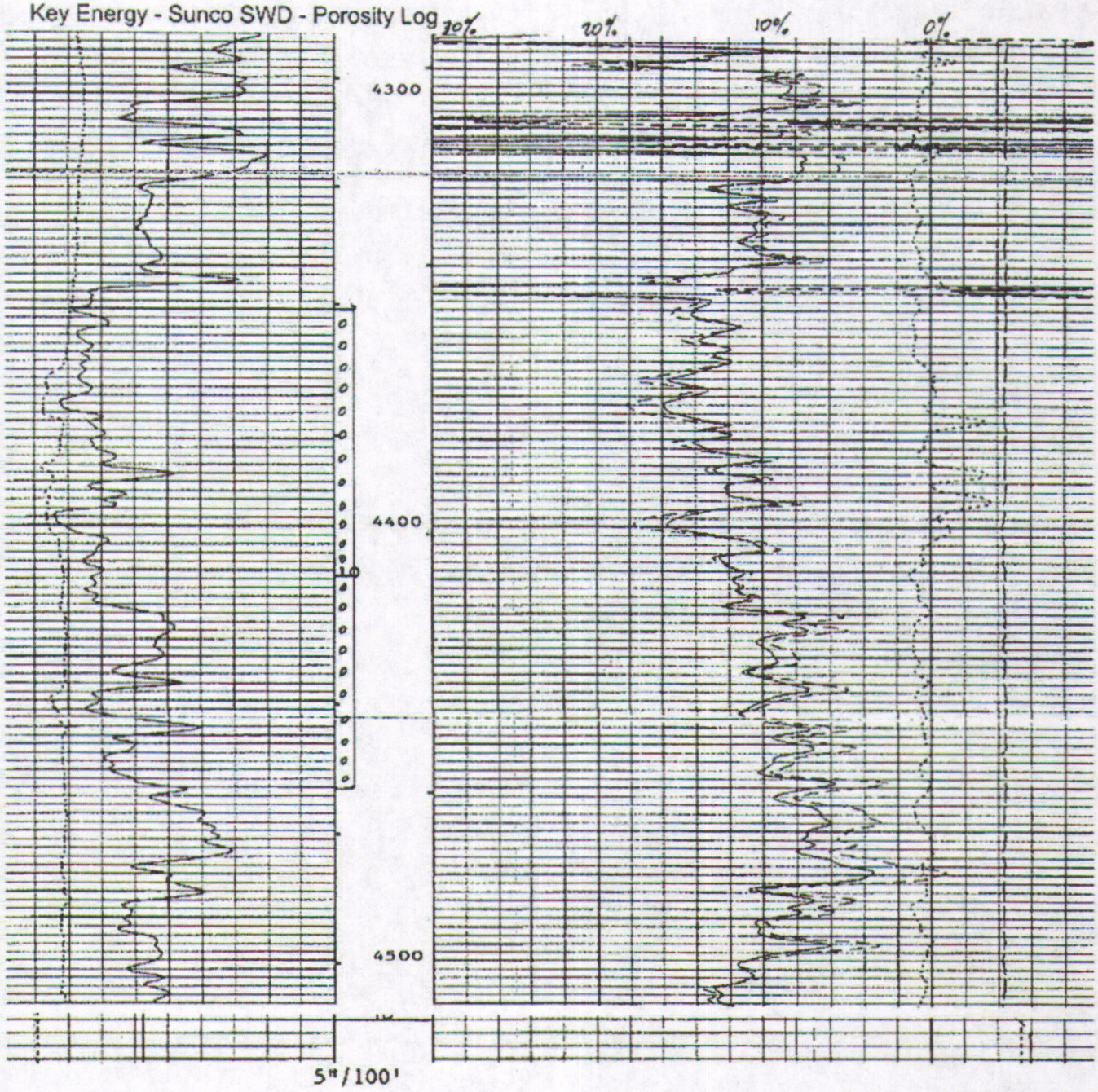
Wellbore Schematic

Sunco No. 1, SWD

Current Wellbore Configuration



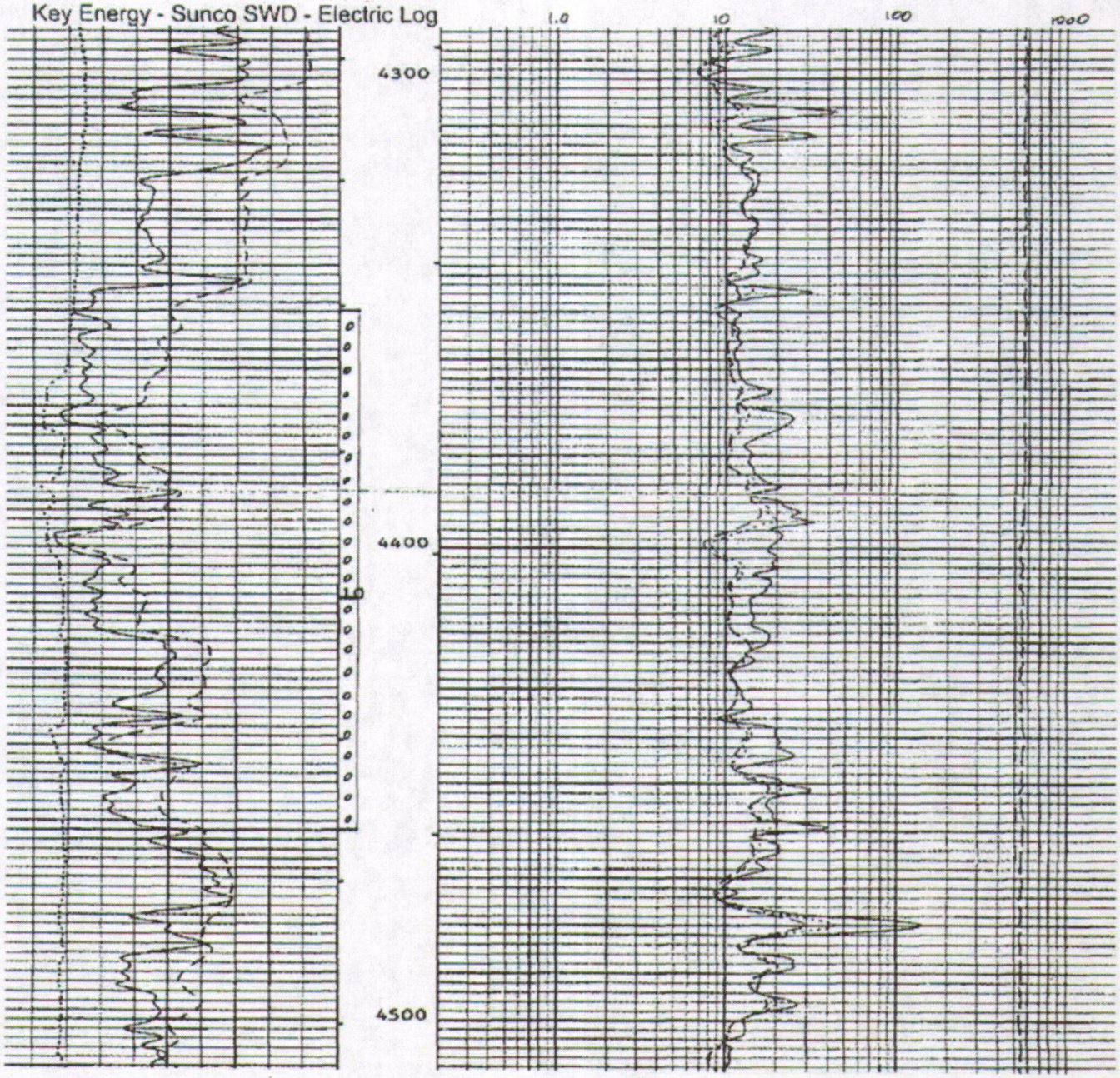
Key Energy - Sunco SWD - Porosity Log



CP 32.6 FILE 6 01-FEB-1992 20:21 (UP)

		DRHO(G/C3)	
		-.2500	.25000
		TENS(LBF)	
		10000.	0.0
CALI(IN)		RHOB(G/C3)	
5.0000	16.000	2.0000	3.0000
GR(GAPI)		DPHI(V/V)	
0.0	200.00	.30000	-.1000

Key Energy - Sunco SWD - Electric Log



		TENS(LBF)	
		10000.	0.0
CALI(IN)		SFLU(OHMM)	
3.0000	16.000	20000	2000.0
GR(GAPI)		ILD(OHMM)	
0.0	200.00	20000	2000.0
SP(MV)		ILM(OHMM)	
80.00	20.000	20000	2000.0

SP-2000

Downhole Memory Pressure Gauge

Our most versatile Pressure/Temperature gauge, the SP-2000 is user friendly. Capabilities range from programming with a computer to simply dialing in the test type and duration.

The internal SMART algorithms capable of detecting the correct pressure and temperature and adjust the sampling rate automatically (once programmed for the test application).

The SP-2000 is tough, dependable, simple, and intelligent. If your job requires gauges that are reliable yet rugged and simple to use, the SP-2000 memory gauge, with its Hybrid-Quartz sensor is the one for you. It is so simple that a paper clip can be used to program it by changing the switch settings for the Type and Duration of test.

With the use of our simple, menu driven software, you can retrieve and report the gauge data (using a compatible computer and printer) from the tool once it is removed from the well.

Advanced reporting features are available such as data printouts, gradient reports, gradient plots and most of the standard time vs. pressure/temperature plot formats.

Micro-Smart Systems is the *SMART* choice for cutting-edge technology and superior customer support. We can save you time, money, and help you keep your customers satisfied.

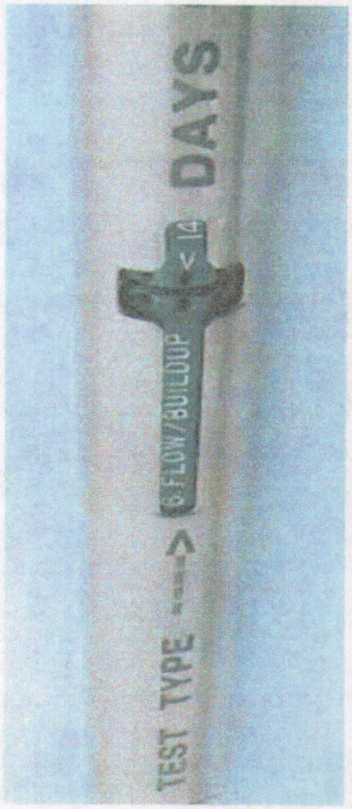
Advantages:

- Very simple to program for data collection
  - a paper clip can be used.
- Very easy to dump data with few key strokes
- Micro-Smart provides superior service

SMART Features:

The technological features of the SP-2000 are:

- Dual EEPROM Memory
- Tool performs internal tests and delivers audible signal to confirm operation
- Multiple-run data storage capability
- User friendly software
- Convert from memory to SRO gauge with simple module change
- Compatible with Micro-Smart's production logging tools
- Standard ASCII data storage format
- Switch selectable programming without the use of a computer
- Selectable switches for duration in *DAYS* and *TYPE* of *TEST*
- Custom computer programming
  - up to 15 time periods
  - specify time interval, sampling rate, and Δ P switching.



SPECIFICATIONS:

Memory Capacity: 48,000 data sets (main memory)
2,000 data sets (backup memory)
(time, pressure, temp.)

Sampling Intervals: 1.875 seconds to 64 minutes
(in binary multiples)

Diameter: 1.25 inch (31.2 mm)

Resolution: Pressure .01 psi
Temp. .04° F

Accuracy: Pressure ± .05 % Full Scale
Temp. ± 1°F
Time ± .05%

Pressure Ranges: 2,500 psi (17,000 KPA)
5,000 psi (34,000 KPA)
10,000 psi (68,000 KPA)
15,000 psi (102,000 KPA)
20,000 psi (136,000 KPA)

Weight: 13 lbs. (5.9 Kg)

Operating Temp.: 32° F to 325° F
(0° C to 160° C)

Power: 13.5v (9 'c' cell Alkaline)
14.4v (4 'c' cell Lithium)

Length: 53 in. (1.3 m) plus battery pack
- 24 in. (.6 m) for 9 cell pack
- 16 in. (.4 m) for 4 cell pack

Micro-Smart Systems, Inc. 5355 Anderson Road Houston, Texas 77053 (713) 433-2277 Fax: (713) 433-2443

Injection Data

UICI-5-0
Agua Moss, LLC
Sunco Disposal #1 30-045-28653

2012
Annual
Injection Report

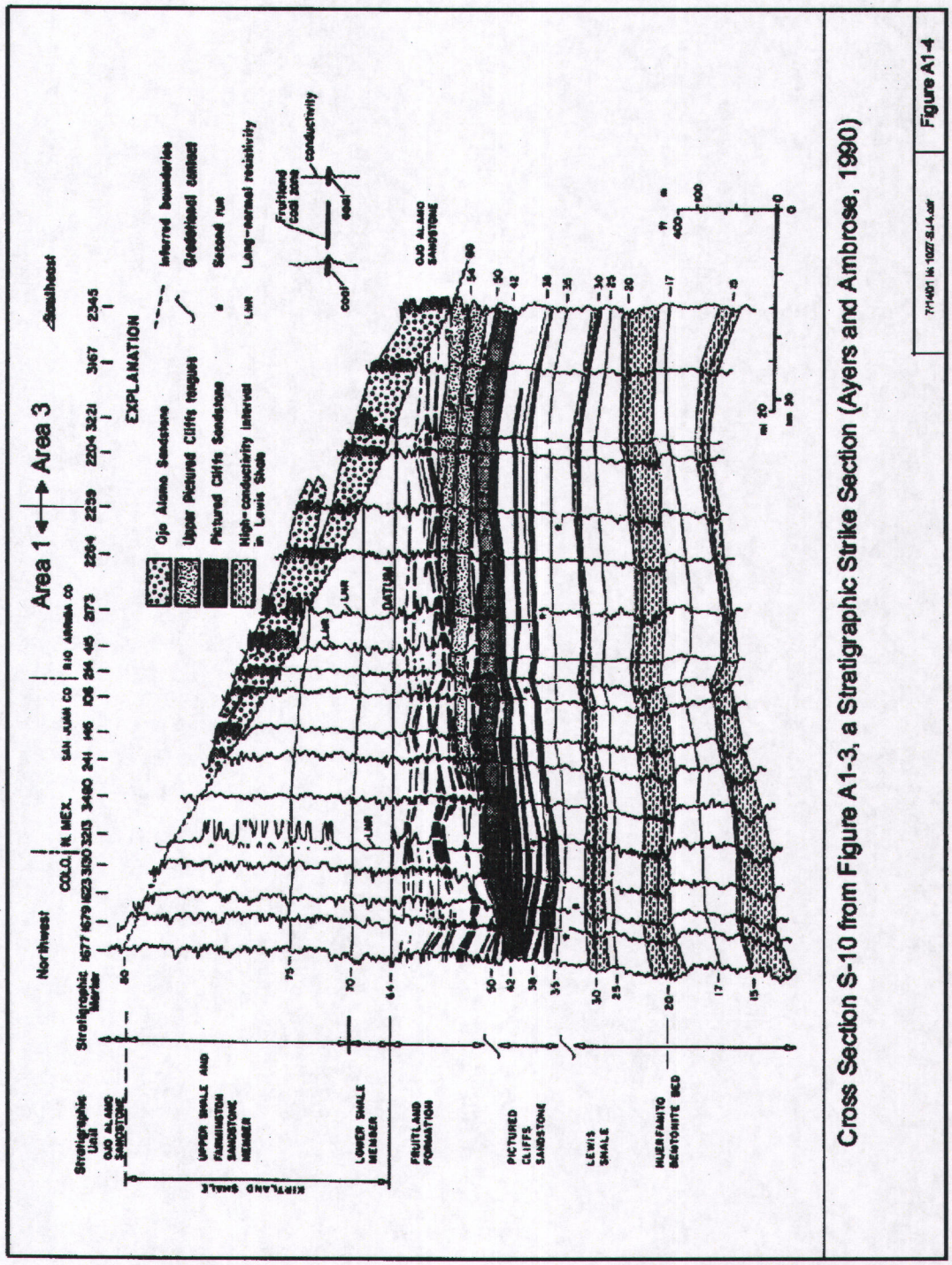
	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maxium Flow (gpm)	Minimum Flow (gpm)	Average Annular Pressure (psig)	Maximum Annular Pressure (psig)	Minimum Annular Pressure (psig)	Average Volume (bpd)	Maximum Volume (bpd)	Minimum Volume (bpd)	Volume (barrels)	Total Cumulative Volume (barrels)	
													Previous Year	12918650	From Key
Jan-2012	1555.645	1850	1500	20.60989	40.8333	0.29166	100	100	100	706.625	1400	10	5653	12924303	
Feb-2012	1507.759	1550	1500	18.35069	29.07916	5.57083	100	100	100	629.1667	997	191	3775	12928078	
Mar-2012	1528.226	1675	1500	19.45947	33.89167	2.6541667	100	100	100	667.1818	1162	91	7339	12935417	
													Previous Quarter	12935417	
Apr-2012	1553.333	1850	1500	27.25139	53.49167	9.0125	100	100	100	934.333	1834	309	8409	12943826	
May-2012	1981	2300	1800	35.66009	90.41666	7	100	100	100	1222.632	3100	240	23230	12967056	
Jun-2012	1852.381	2150	1675	16.65417	23.12917	7.816666	100	100	100	571	793	268	5139	12972195	
													Previous Quarter	12972195	
Jul-2012	1763.043	1950	1600	11.86435	20.85417	5.25	100	100	100	406.777	715	180	3661	12975856	
Aug-2012	1714.13	2000	1500	12.13698	24.0004	4.958333	100	100	100	416.125	823	170	3329	12979185	
Sep-2012	1692.5	1975	1500	9.433796	17.325	1.4	100	100	100	323.444	594	48	2911	12982096	
													Previous Quarter	12982096	
Oct-2012	1734.783	2050	1500	9.132083	19.04583	3.85	100	100	100	313.1	653	132	3131	12985227	
Nov-2012	1654.545	1900	1500	9.325	15.575	5.2791667	100	100	100	319.7143	534	181	2238	12987465	
Dec-2012	1605	1800	1400	5.213542	9.1875	0.8458333	100	100	100	178.75	315	29	1430	12988895	
													Total for year 70245	13059140	Life Of well injected

UICI-5-0
Agua Moss, LLC
Sunco Disposal #1 30-045-28653

2013
Quarterly
Injection Report

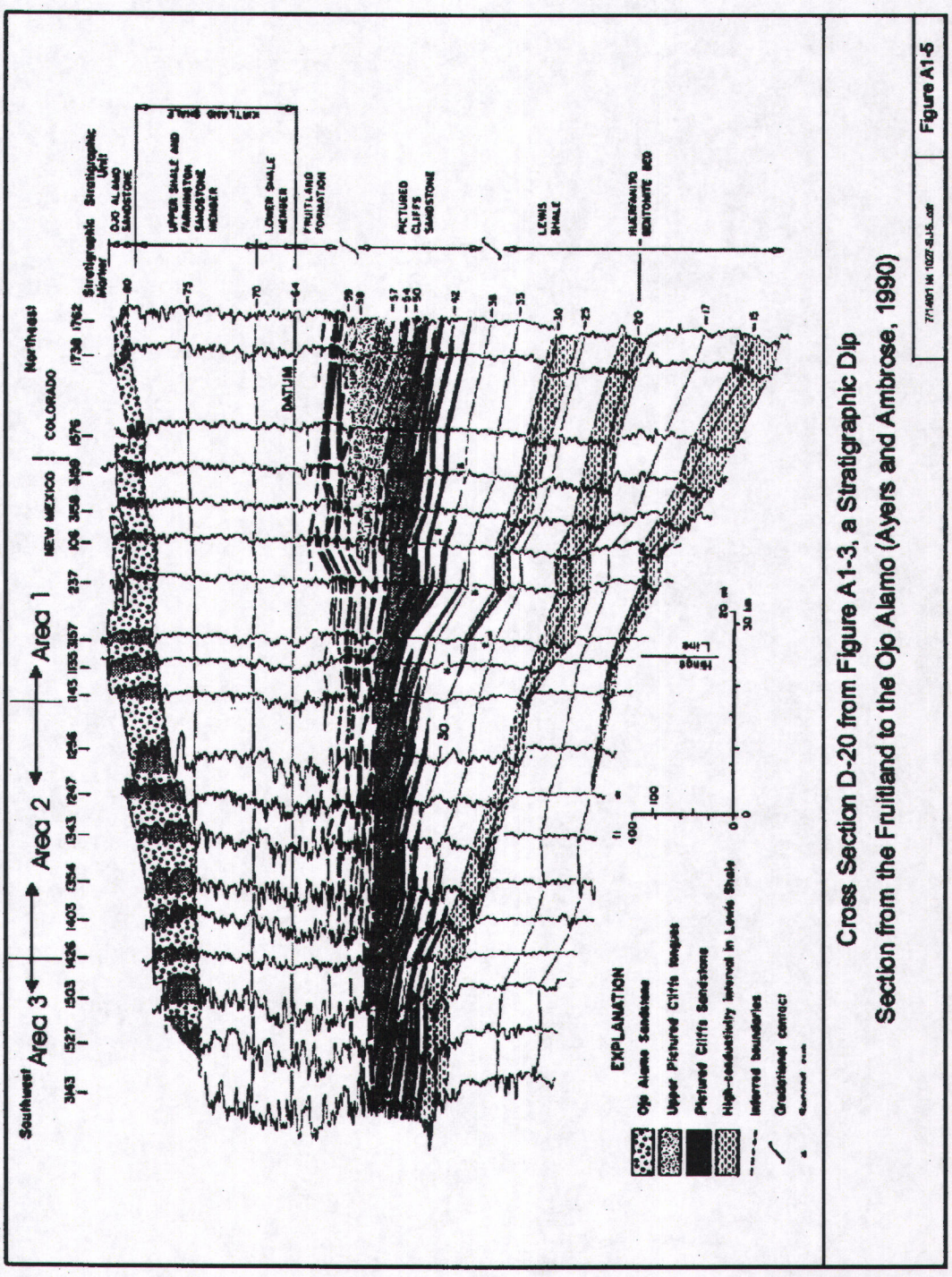
	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maxium Flow (gpm)	Minimum Flow (gpm)	Average Annular Pressure (psig)	Maximum Annular Pressure (psig)	Minimum Annular Pressure (psig)	Average Volume (bpd)	Maximum Volume (bpd)	Minimum Volume (bpd)	Volume (barrels)	Total Cumulative Volume (barrels)	
													Previous year	13059140	
Jan-2013	1630.435	1900	1450	8.937962	15.45833	1.808333	100	100	100	306.444	530	62	2758	13061898	
Feb-2013	1757.5	1950	1500	12.075	16.1875	6.65	100	100	100	414	555	228	4554	13066452	
Mar-2013	1742.857	1950	1500	11.11515	18.75417	0.0291667	100	100	100	381.0909	643	1	4192	13070644	
													Previous Quarter	13070644	
Apr-2013	1968.269	2250	1600	23.41951	36.89583	1.05	100	100	100	802.9545	1265	36	17665	13088309	
May-2013	1950	2150	1700	11.85855	30.74167	1.7791	100	100	100	406.5789	1054	61	7725	13096034	
Jun-2013	1955	2200	1550	11.68935	32.95833	4.725	100	100	100	400.7778	1130	162	7214	13103248	
													Previous Quarter	13103248	
Jul-2013	#DIV/0!	0	0											13103248	
Aug-2013	#DIV/0!	0	0											13103248	
Sep-2013	#DIV/0!	0	0											13103248	
													Previous Quarter	13103248	
Oct-2013	#DIV/0!	0	0											13103248	
Nov-2013	#DIV/0!	0	0											13103248	
Dec-2013	#DIV/0!	0	0											13103248	
													Total for year 44108	13147356	Life Of well injected

Geology



Cross Section S-10 from Figure A1-3, a Stratigraphic Strike Section (Ayers and Ambrose, 1990)

Figure A1-4

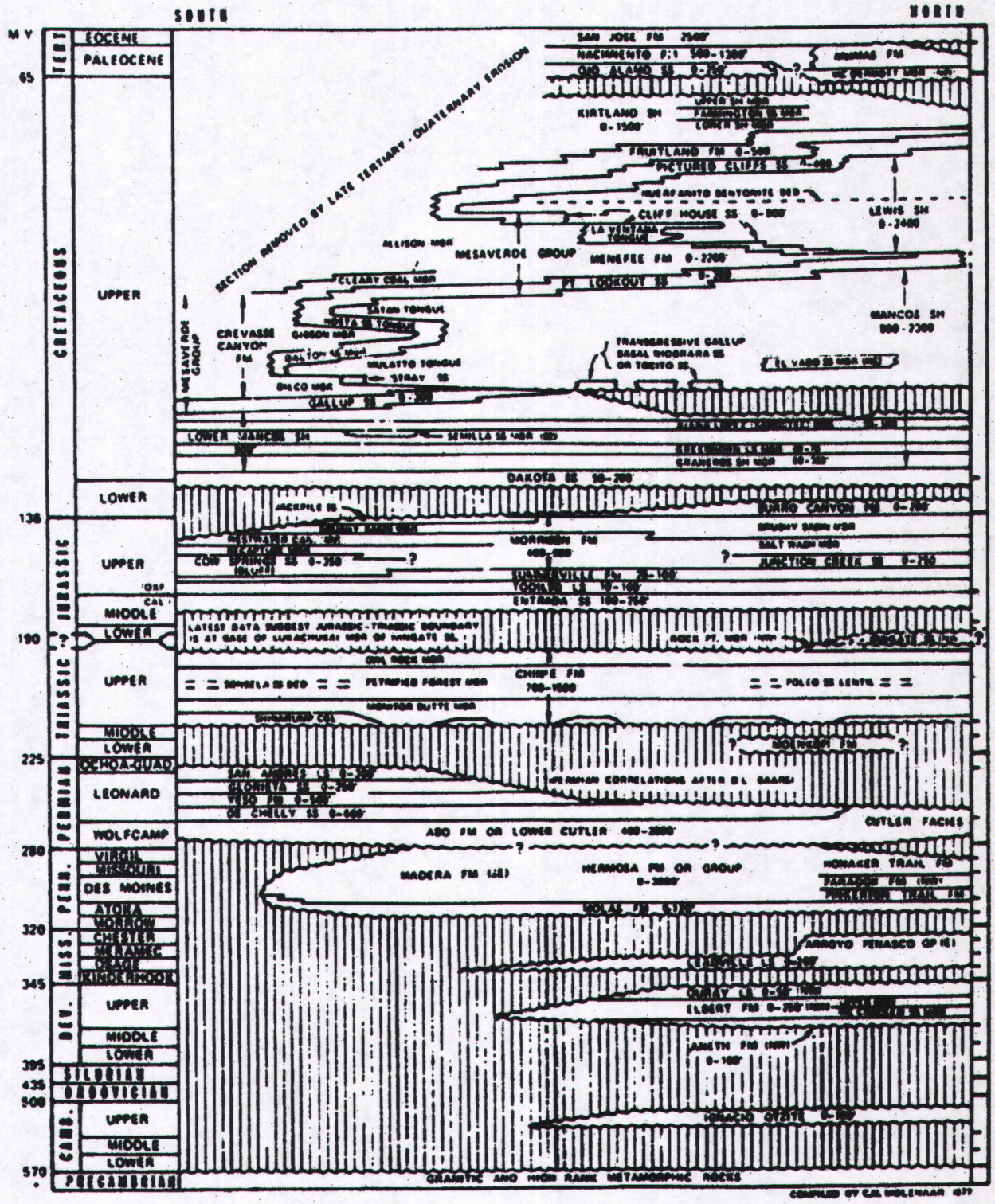


Cross Section D-20 from Figure A1-3, a Stratigraphic Dip Section from the Fruitland to the Ojo Alamo (Ayers and Ambrose, 1990)

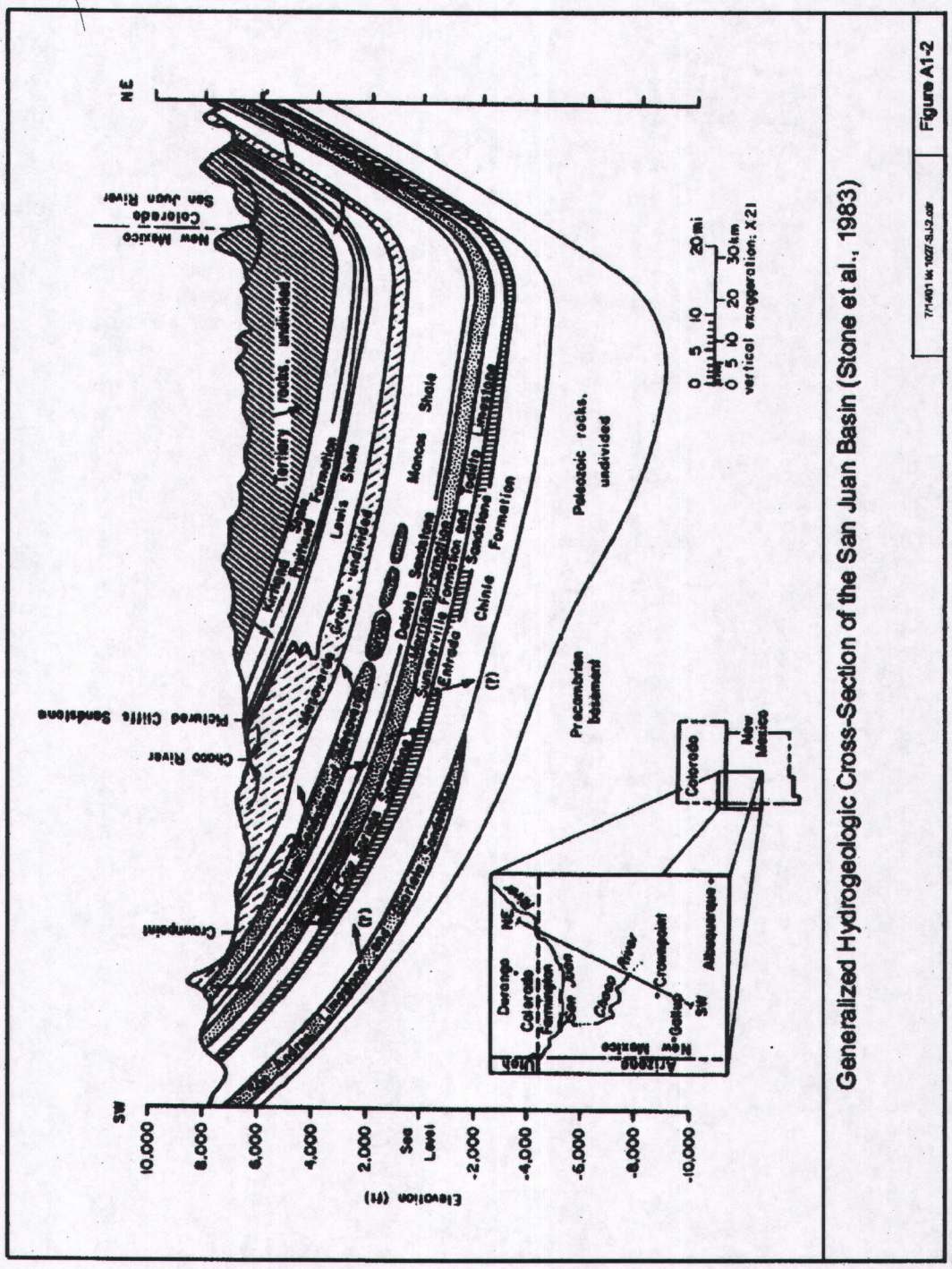
Figure A1-5

7e1

TIME-STRATIGRAPHIC NOMENCLATURE CHART
(SAN JUAN BASIN)



7e2



Generalized Hydrogeologic Cross-Section of the San Juan Basin (Stone et al., 1983)

Figure A1-2

Figure 5 Approximate depth to the top of the Ojo Alamo Sandstone.

Te 3

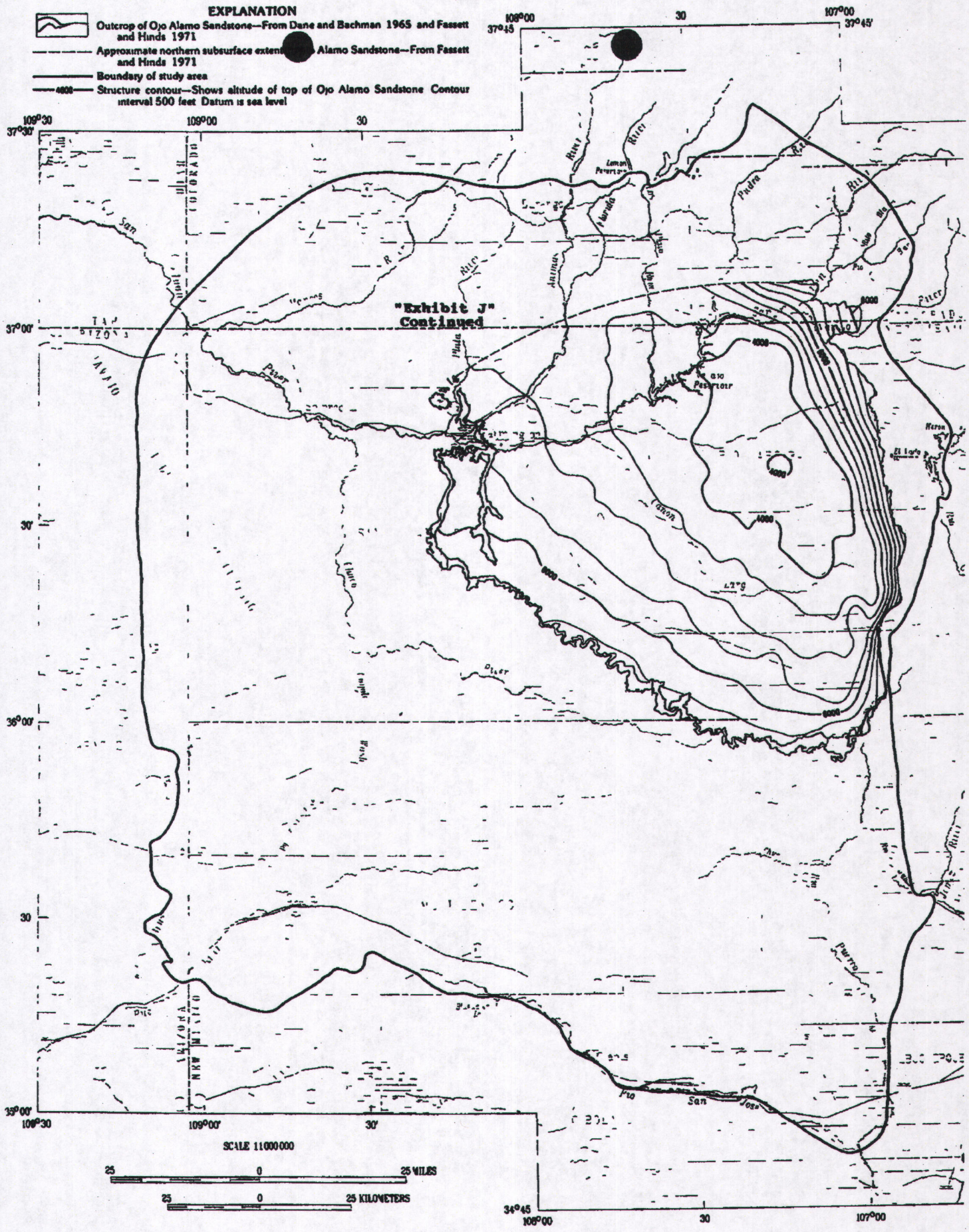


Figure 6 Approximate altitude and configuration of the top of the Ojo Alamo Sandstone

7c4

McGrath SWD #4

1.25 miles from Sunco Disposal #1

P&A NOI

Production Summary Report

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAY 01 2013
Farmington Field Office
Bureau of Land Management

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2.*

5. Lease Serial No. **SF-077922**

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other SWD

8. Well Name and No. **McGrath SWD 4**

2. Name of Operator **Burlington Resources Oil & Gas Company LP**

9. API Well No. **30-045-25923**

3a. Address **PO Box 4289, Farmington, NM 87499**

3b. Phone No. (include area code) **(505) 326-9700**

10. Field and Pool or Exploratory Area **Mesaverde SWD**

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
Surface Unit B (NWNE), 800' FNL & 1730' FEL, Sec. 34, T30N, R12W

11. Country or Parish, State **San Juan , New Mexico**

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
BP	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Burlington Resources requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematics.

Add a Chacra plug from 2544' to 2644'

RCVD MAY 7 '13
OIL CONS. DIV.
DIST. 3

Notify NMOCD 24 hrs prior to beginning operations

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Dollie L. Busse Title **Staff Regulatory Technician**

Signature Dollie L Busse Date 4/30/13

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
Original Signed: Stephen Mason Title Date MAY 03 2013

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instruction on page 2)

NMOCD

ConocoPhillips
MCGRATH 4 SWD
Expense - P&A

Lat 36° 46' 27.012" N Long 108° 4' 54.912" W

PROCEDURE

This project requires a NMOCD C-144 CLEZ Closed-Loop System Permit for the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

1. Hold pre-job safety meeting. Comply with all NMOCD, BLM, and COPC safety and environmental regulations. Test rig anchors prior to moving in rig.

2. RU slickline unit. Set RCE blanking plug in the R profile nipple at 4212'. Anticipate ~1150 psig tubing pressure and 300 psig casing pressure. Bleed off tubing and casing pressures after setting plug.

3. MIRU work over rig. Check casing, tubing, and bradenhead pressures and record them in Wellview.

4. When an existing primary valve (i.e. casing valve) is to be used, the existing piping should be removed and replaced with the appropriate piping for the intended operation.

5. RU blow lines from casing valves and bleed off tubing and casing pressures.

6. ND wellhead and NU BOPE. Function and pressure test BOP. PU and remove tubing hanger. Release from on/off tool. Do not circulate hole. Annular fluid is treated with corrosion inhibitor.

7. TOOH and laydown 3-1/2" tubing (per pertinent data sheet). Packer and lower tail assembly will be left in the hole.

Rods:	No	**Size:**		**Length:**	
Tubing:	Yes	**Size:**	3-1/2"	**Length:**	4186'
Packer:	Yes	**Size:**	5-1/2"	**Depth:**	4197'

8. Pick up 2-3/8" workstring and round trip watermelon mill to 3600'.

9. Pressure test the tubing to 800 psig an the casing to 1500 psig. If casing does not test, spot and/or tag plugs as appropriate.

All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Type II mixed at 15.6 ppg with a 1.18 cf/sk yield.

10. Plug 1 (Mesaverde, 3985-4197', 30 Sacks Class B Cement - Cement volume has been increased to provide safety factor for this SWD well)
TIH to packer top at 4197'. Establish circulation and circulate well clean. Mix 30 sx Class B cement and spot inside the casing above the packer to isolate the Point Lookout injection interval. TOOH.

11. Plug 2 (Mesaverde, 3335-3535', 88 Sacks Class B Cement - Cement volume has been increased to provide safety factor for this SWD well)
RU wireline unit. GIH with 3-1/8" HSC guns and perforate 3 squeeze holes at 3535'. RD wireline. TIH and set 5-1/2" cement retainer at 3485'. Load hole with water and circulate well clean. Pressure test tubing to 1000 psig. Mix 88 sx of Class B cement and squeeze 59 sx behind casing and leave 29 sx inside to cover the Mesaverde top. TOOH.

12. Plug 3 (Pictured Cliffs, 1836-1936', 17 Sacks Class B Cement)
TIH. Mix 17 sx Class B cement and spot a balanced plug to cover the Pictured Cliffs formation top.

13. Plug 4 (Fruitland Coal, ~~1240~~ 1660-~~1340~~ 1560', 17 Sacks Class B Cement)
Mix 17 sx of Class B cement and spot a balanced plug to cover the Fruitland Coal formation top.

14. Plug 5 (Ojo Alamo & Kirtland, 360-620', 36 Sacks Class B Cement)
Mix 36 sx of Class B cement and spot a balanced plug to cover the Ojo Alamo and Kirtland formation tops. POOH.

15. Plug 6 (Surface, 0-281', 99 Sacks Class B Cement)
RU wireline unit. GIH with 3-1/8" HSC guns and perforate 3 squeeze holes at 281'. RD wireline. Establish circulation through bradenhead valve. Mix and pump 99 sx Class B cement down production casing and circulate cement out bradenhead. Shut well in and WOC.

16. Nipple down BOP and cut off casing below the casing flange. Install P&A marker with cement to comply with regulations. Rig down and move off location. Anchors will be removed as part of the reclamation phase that is currently in progress.

Current Schematic

ConocoPhillips

Well Name: MCGRATH #4 SWD

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004525923	SEC 34 T30N R12W	SWD;MESAVERDE		NEW MEXICO	

Ground Elevation (ft)	Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)
5,749.00	5,761.00	12.00	5,761.00	5,761.00

Well Config: - Original Hole, 3/28/2013 7:34:47 AM

ftKB (MD)	ftKB (TVD)	Schematic - Actual	Frm Final
0		Tubing Joints (internally plastic coated - TK-99), 3 1/2in, 9.30lbs/ft, J-55, 12 ftKB, 45 ftKB	
12		Tubing Pup Js (internally plastic coated - TK-99), 3 1/2in, 9.30lbs/ft, J-55, 45 ftKB, 67 ftKB	
45		Surface Casing Cement, 12-231, 9/4/1984, Cemented w/230 sxs Class B. Circ 5 bbls to surface.	
67		Surface, 8 5/8in, 8.097in, 12 ftKB, 231 ftKB	
230			
231		TOC @ 378'	
240		Cement Squeeze, 378-600, 9/26/1984, Perfd 2 squeeze holes @ 554', set pkr @ 345', squeezed w/100 sxs Class B.	
378		9/27/1984 sqz cmt hole @ 340' w/100 sxs Class B. & 75 sxs Class B. 9/29/1984 CBL, 600' to 378' good bond.	OJO ALAMO, 410
410		Production Casing Cement, 550-2,139, 9/12/1984, 2nd Stage cmt w/310 sxs Class H 65/35 Poz, tailed w/50 sxs Class H. TOC @ 550' CBL 9/26/1984.	KIRTLAND, 570
570		Cement Squeeze, 1,970-2,200, 9/26/1984, DV tool leaking, set retainer @ 1667', squeezed w/100 sxs Class B. 9/29/1984 CBL good bond from 2200' to 1970'.	FRUITLAND, 1,290
1,290			PICTURED CLIFFS, 1,886
1,886		Tubing Joints (internally plastic coated - TK-99), 3 1/2in, 9.30lbs/ft, J-55, 67 ftKB, 4,162 ftKB	LEWIS, 2,100
2,100			
2,137			
2,139			
2,933			CHACRA, 2,933
3,485		TOC @ 3565'	CLIFF HOUSE, 3,485
3,565		Tubing Joints (internally plastic coated - TK-99), 3 1/2in, 9.30lbs/ft, J-55, 4,162 ftKB, 4,194 ftKB	
3,603			MENEFEE, 3,603
4,162		2 7/8" BRD EUE X 3 1/2" BRD EUE X/O, 3 1/2in, 9.30lbs/ft, J-55, 4,194 ftKB, 4,195 ftKB	
4,194		X-NIPPLE--2.310" ID, 2 7/8in, 6.50lbs/ft, J-55, 4,195 ftKB, 4,196 ftKB	
4,195			
4,195		ON/OFF TOOL/F-PROFILE--2.250" ID, 2 7/8in, 6.50lbs/ft, J-55, 4,196 ftKB, 4,198 ftKB	
4,197			
4,198		Packer, 4,197-4,202	
4,201		Tubing Sub, 4,202-4,212	
4,212		R-Nipple, 4,212-4,212	
4,212		Wireline Entry Guide, 4,212-4,213	
4,213		Acid Frac, 9/29/1984, Acid Frac'd w/7,700 gals of 15% MCA acid & 200 ball sealer.	
4,263			POINT LOOKOUT, 4,263
4,272		Hyd Frac-Slickwater, 8/15/1985, Frac'd w/ 102,000# of 20/40 sand and 127,000 gals of slickwater.	
4,374		Point Lookout, 4,272-4,374, 9/29/1984	
4,616			MANCOS, 4,616
4,653		PBTD, 4,653	
4,653			
4,655		Production Casing Cement, 3,565-4,698, 9/12/1984, 1st Stage cmt w/150 sxs Class B. TOC @ 3565' by CBL 9/26/1984.	
4,697		Production 1, 5 1/2in, 4.950in, 12 ftKB, 4,698 ftKB	
4,698			
4,700		TD, 4,700, 9/5/1984	
		Display Cement Fill, 4,698-4,700, 9/12/1984	

Proposed Schematic

ConocoPhillips

Well Name: MCGRATH #4 SWD

API/UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004525923	SEC 34 T30N R12W	SWD;MESAVERDE		NEW MEXICO	Edit

Ground Elevation (ft)	Original RKB/RT Elevation (ft)	RKB-Ground Distance (ft)	RKB-Casing Flange Distance (ft)	RKB-Tubing Hanger Distance (ft)
5,749.00	5,761.00	12.00	5,761.00	5,761.00

Well Config: - Original Hole, 1/1/2020

ftKB (MD)	Frm Final	Schematic - Actual
0		
12		
45		
67		
230		
231		Surface, 8 5/8in, 8.097in, 12 ftKB, 231 ftKB
240		
281		SQUEEZE PERFS, 281, 1/1/2020
360		
378		
410	OJO ALAMO, 410	
550		
570	KIRTLAND, 570	
600		
620		
1,240		
1,290	FRUITLAND, 1,290	
1,340		
1,836		
1,886	PICTURED CLIFFS, 1,886	
1,936		
1,970		
2,100	LEWIS, 2,100	
2,137		
2,139		
2,139		
2,200		
2,933	CHACRA, 2,933	
3,335		
3,485	CLIFF HOUSE, 3,485	
3,486		Cement Retainer, 3,485-3,486
3,535		SQUEEZE PERFS, 3,535, 1/1/2020
3,565		
3,603	MENEFEE, 3,603	
3,985		
4,162		
4,194		
4,195		
4,196		
4,197		
4,198		Packer, 4,197-4,202
4,201		Tubing Sub, 4,202-4,212
4,212		R-Nipple, 4,212-4,212
4,212		
4,213		Wireline Entry Guide, 4,212-4,213
4,263	POINT LOOKOUT, 4,263	
4,272		Point Lookout, 4,272-4,374, 9/29/1984
4,374		
4,616	MANCOS, 4,616	
4,653		PBTD, 4,653
4,653		
4,655		
4,697		Production1, 5 1/2in, 4.950in, 12 ftKB, 4,698 ftKB
4,698		
4,700		TD, 4,700, 9/5/1984

Surface Casing Cement, 12-231, 9/4/1984, Cemented w/230 sxs Class B. Circ 5 bbls to surface.

Plug #6, 12-281, 1/1/2020

Plug #6, 12-281, 1/1/2020, Mix 99 sx Class B cement and pump down production casing to circulate good cement out bradenhead.

Cement Squeeze, 378-600, 9/26/1984, Perf'd 2 squeeze holes @ 554', set pkr @ 345', squeezed w/100 sxs Class B. 9/27/1984 sqz cmt hole @ 540' w/100 sxs Class B, & 75 sxs Class B. 9/29/1984 CBL, 600' to 378' good bond.

Plug #5, 360-620, 1/1/2020, Mix 36 sx Class B cement and spot a balanced plug to cover the Ojo Alamo and Kirtland formation tops.

Plug #4, 1,240-1,340, 1/1/2020, Mix 17 sx Class B cement and spot a balanced plug to cover the Fruitland formation top.

Plug #3, 1,836-1,936, 1/1/2020, Mix 17 sx Class B cement and spot a balanced plug to cover the Pictured Cliffs formation top.

Production Casing Cement, 550-2,139, 9/12/1984, 2nd Stage cmt w/310 sxs Class H 65/35 Poz, tailed w/50 sxs Class H. TOC @ 550' CBL 9/26/1984.

Cement Squeeze, 1,970-2,200, 9/26/1984, DV tool leaking, set retainer @ 1867', squeezed w/100 sxs Class B. 9/29/1984 CBL good bond from 2200' to 1970'.

Plug #2, 3,335-3,535, 1/1/2020

Plug #2, 3,335-3,535, 1/1/2020, Mix 88 sx Class B cement, squeeze 59 sx behind casing and leave 29 sx inside casing to cover the Mesaverde formation top.

Plug #1, 3,985-4,197, 1/1/2020, Mix 30 sx Class B cement and spot inside the casing above packer to isolate the Mesaverde injection interval.

Acid Frac, 9/29/1984, Acid Frac'd w/7,700 gals of 15% MCA acid & 200 ball sealer.

Hyd Frac-Slickwater, 8/15/1986, Frac'd w/ 102,000# of 20/40 sand and 127,000 gals of slickwater.

Production Casing Cement, 3,565-4,698, 9/12/1984, 1st Stage cmt w/150 sxs Class B. TOC @ 3565' by CBL 9/26/1984.

Display Cement Fill, 4,698-4,700, 9/12/1984

Report Printed: 4/18/2013

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: 4 McGrath SWD

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

3. The following modifications to your plugging program are to be made:

a) Place the Fruitland plug from 1660' – 1560'.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

Production Summary Report
API: 30-045-25923
[7308] MCGRATH #004
Printed On: Monday, July 15 2013

		Production					Injection				
Year	Pool	Month	Oil(BBLS	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
1994	[96160] SWD;MESAVERDE	Jun	0	0	0	30	112700	0	0	0	200
1994	[96160] SWD;MESAVERDE	Jul	0	0	0	31	110154	0	0	0	200
1994	[96160] SWD;MESAVERDE	Aug	0	0	0	31	111718	0	0	0	200
1994	[96160] SWD;MESAVERDE	Sep	0	0	0	30	105242	0	0	0	200
1994	[96160] SWD;MESAVERDE	Oct	0	0	0	31	118984	0	0	0	200
1994	[96160] SWD;MESAVERDE	Nov	0	0	0	30	119134	0	0	0	200
1994	[96160] SWD;MESAVERDE	Dec	0	0	0	31	79398	0	0	0	200
1995	[96160] SWD;MESAVERDE	Jan	0	0	0	31	56833	0	0	0	200
1995	[96160] SWD;MESAVERDE	Feb	0	0	0	28	61675	0	0	0	200
1995	[96160] SWD;MESAVERDE	Mar	0	0	0	31	59138	0	0	0	200
1995	[96160] SWD;MESAVERDE	Apr	0	0	0	30	64598	0	0	0	200
1995	[96160] SWD;MESAVERDE	May	0	0	0	31	70303	0	0	0	200
1995	[96160] SWD;MESAVERDE	Jun	0	0	0	30	66433	0	0	0	200
1995	[96160] SWD;MESAVERDE	Jul	0	0	0	31	71348	0	0	0	200
1995	[96160] SWD;MESAVERDE	Aug	0	0	0	31	68910	0	0	0	200
1995	[96160] SWD;MESAVERDE	Sep	0	0	0	30	54726	0	0	0	200
1995	[96160] SWD;MESAVERDE	Oct	0	0	0	31	58537	0	0	0	200
1995	[96160] SWD;MESAVERDE	Nov	0	0	0	30	61572	0	0	0	200
1995	[96160] SWD;MESAVERDE	Dec	0	0	0	31	67686	0	0	0	200
1996	[96160] SWD;MESAVERDE	Jan	0	0	0	31	11565	0	0	0	200
1996	[96160] SWD;MESAVERDE	Feb	0	0	0	29	16421	0	0	0	200
1996	[96160] SWD;MESAVERDE	Mar	0	0	0	31	72512	0	0	0	200
1996	[96160] SWD;MESAVERDE	Apr	0	0	0	30	67957	0	0	0	200
1996	[96160] SWD;MESAVERDE	May	0	0	0	31	71603	0	0	0	200
1996	[96160] SWD;MESAVERDE	Jun	0	0	0	30	60120	0	0	0	200
1996	[96160] SWD;MESAVERDE	Jul	0	0	0	31	58892	0	0	0	200
1996	[96160] SWD;MESAVERDE	Aug	0	0	0	31	54246	0	0	0	200
1996	[96160] SWD;MESAVERDE	Sep	0	0	0	30	47968	0	0	0	200
1996	[96160] SWD;MESAVERDE	Oct	0	0	0	31	59722	0	0	0	200
1996	[96160] SWD;MESAVERDE	Nov	0	0	0	30	57438	0	0	0	200
1996	[96160] SWD;MESAVERDE	Dec	0	0	0	31	54907	0	0	0	200
1997	[96160] SWD;MESAVERDE	Jan	0	0	0	31	46660	0	0	0	200
1997	[96160] SWD;MESAVERDE	Feb	0	0	0	28	45985	0	0	0	200
1997	[96160] SWD;MESAVERDE	Mar	0	0	0	31	44352	0	0	0	200
1997	[96160] SWD;MESAVERDE	Apr	0	0	0	30	50379	0	0	0	200
1997	[96160] SWD;MESAVERDE	May	0	0	0	31	50249	0	0	0	200
1997	[96160] SWD;MESAVERDE	Jun	0	0	0	30	44537	0	0	0	200
1997	[96160] SWD;MESAVERDE	Jul	0	0	0	31	39677	0	0	0	200
1997	[96160] SWD;MESAVERDE	Aug	0	0	0	31	43034	0	0	0	200
1997	[96160] SWD;MESAVERDE	Sep	0	0	0	30	40413	0	0	0	200
1997	[96160] SWD;MESAVERDE	Oct	0	0	0	31	43881	0	0	0	200
1997	[96160] SWD;MESAVERDE	Nov	0	0	0	30	45642	0	0	0	200
1997	[96160] SWD;MESAVERDE	Dec	0	0	0	31	43055	0	0	0	200
1998	[96160] SWD;MESAVERDE	Jan	0	0	0	31	47810	0	0	0	200
1998	[96160] SWD;MESAVERDE	Feb	0	0	0	28	41650	0	0	0	200
1998	[96160] SWD;MESAVERDE	Mar	0	0	0	31	51027	0	0	0	200
1998	[96160] SWD;MESAVERDE	Apr	0	0	0	30	52621	0	0	0	200
1998	[96160] SWD;MESAVERDE	May	0	0	0	31	53027	0	0	0	200
1998	[96160] SWD;MESAVERDE	Jun	0	0	0	30	48016	0	0	0	200
1998	[96160] SWD;MESAVERDE	Jul	0	0	0	31	53629	0	0	0	200
1998	[96160] SWD;MESAVERDE	Aug	0	0	0	31	53795	0	0	0	200
1998	[96160] SWD;MESAVERDE	Sep	0	0	0	30	56234	0	0	0	200
1998	[96160] SWD;MESAVERDE	Oct	0	0	0	31	58794	0	0	0	200

1998	[96160] SWD;MESAVERDE	Nov	0	0	0	30	56698	0	0	0	0
1998	[96160] SWD;MESAVERDE	Dec	0	0	0	31	57543	0	0	0	0
1999	[96160] SWD;MESAVERDE	Jan	0	0	0	31	59355	0	0	0	0
1999	[96160] SWD;MESAVERDE	Feb	0	0	0	28	59412	0	0	0	0
1999	[96160] SWD;MESAVERDE	Mar	0	0	0	31	63648	0	0	0	0
1999	[96160] SWD;MESAVERDE	Apr	0	0	0	30	66047	0	0	0	0
1999	[96160] SWD;MESAVERDE	May	0	0	0	31	56074	0	0	0	0
1999	[96160] SWD;MESAVERDE	Jun	0	0	0	30	58671	0	0	0	0
1999	[96160] SWD;MESAVERDE	Jul	0	0	0	31	55762	0	0	0	0
1999	[96160] SWD;MESAVERDE	Aug	0	0	0	31	62725	0	0	0	0
1999	[96160] SWD;MESAVERDE	Sep	0	0	0	30	59851	0	0	0	0
1999	[96160] SWD;MESAVERDE	Oct	0	0	0	31	72777	0	0	0	1475
1999	[96160] SWD;MESAVERDE	Nov	0	0	0	30	76677	0	0	0	1482
1999	[96160] SWD;MESAVERDE	Dec	0	0	0	31	79895	0	0	0	3040
2000	[96160] SWD;MESAVERDE	Jan	0	0	0	31	83375	0	0	0	1481
2000	[96160] SWD;MESAVERDE	Feb	0	0	0	29	99796	0	0	0	1623
2000	[96160] SWD;MESAVERDE	Mar	0	0	0	31	91675	0	0	0	1677
2000	[96160] SWD;MESAVERDE	Apr	0	0	0	30	101616	0	0	0	1670
2000	[96160] SWD;MESAVERDE	May	0	0	0	31	85186	0	0	0	1660
2000	[96160] SWD;MESAVERDE	Jun	0	0	0	30	82195	0	0	0	1647
2000	[96160] SWD;MESAVERDE	Jul	0	0	0	31	85513	0	0	0	1715
2000	[96160] SWD;MESAVERDE	Aug	0	0	0	31	81702	0	0	0	1724
2000	[96160] SWD;MESAVERDE	Sep	0	0	0	30	95804	0	0	0	1759
2000	[96160] SWD;MESAVERDE	Oct	0	0	0	31	92932	0	0	0	1736
2000	[96160] SWD;MESAVERDE	Nov	0	0	0	30	87240	0	0	0	1711
2000	[96160] SWD;MESAVERDE	Dec	0	0	0	31	95994	0	0	0	1673
2001	[96160] SWD;MESAVERDE	Jan	0	0	0	31	96702	0	0	0	1642
2001	[96160] SWD;MESAVERDE	Feb	0	0	0	28	85634	0	0	0	1673
2001	[96160] SWD;MESAVERDE	Mar	0	0	0	31	138124	0	0	0	1783
2001	[96160] SWD;MESAVERDE	Apr	0	0	0	30	145271	0	0	0	1792
2001	[96160] SWD;MESAVERDE	May	0	0	0	31	124912	0	0	0	1772
2001	[96160] SWD;MESAVERDE	Jun	0	0	0	30	107485	0	0	0	1721
2001	[96160] SWD;MESAVERDE	Jul	0	0	0	31	103252	0	0	0	1739
2001	[96160] SWD;MESAVERDE	Aug	0	0	0	0	131295	0	0	0	1786
2001	[96160] SWD;MESAVERDE	Sep	0	0	0	0	91420	0	0	0	1803
2001	[96160] SWD;MESAVERDE	Oct	0	0	0	0	142245	0	0	0	1795
2001	[96160] SWD;MESAVERDE	Nov	0	0	0	0	140895	0	0	0	1840
2001	[96160] SWD;MESAVERDE	Dec	0	0	0	0	84773	0	0	0	1832
2002	[96160] SWD;MESAVERDE	Jan	0	0	0	0	116780	0	0	0	1817
2002	[96160] SWD;MESAVERDE	Feb	0	0	0	0	101740	0	0	0	1738
2002	[96160] SWD;MESAVERDE	Mar	0	0	0	0	102045	0	0	0	1741
2002	[96160] SWD;MESAVERDE	Apr	0	0	0	0	91660	0	0	0	1753
2002	[96160] SWD;MESAVERDE	May	0	0	0	0	82830	0	0	0	1650
2002	[96160] SWD;MESAVERDE	Jun	0	0	0	0	71185	0	0	0	1596
2002	[96160] SWD;MESAVERDE	Jul	0	0	0	0	77980	0	0	0	1586
2002	[96160] SWD;MESAVERDE	Aug	0	0	0	0	90150	0	0	0	1621
2002	[96160] SWD;MESAVERDE	Sep	0	0	0	0	80494	0	0	0	1639
2002	[96160] SWD;MESAVERDE	Oct	0	0	0	0	101527	0	0	0	1673
2002	[96160] SWD;MESAVERDE	Nov	0	0	0	0	109410	0	0	0	1635
2002	[96160] SWD;MESAVERDE	Dec	0	0	0	0	94647	0	0	0	1621
2003	[96160] SWD;MESAVERDE	Jan	0	0	0	0	108450	0	0	0	1699
2003	[96160] SWD;MESAVERDE	Feb	0	0	0	0	86026	0	0	0	1728
2003	[96160] SWD;MESAVERDE	Mar	0	0	0	0	115930	0	0	0	1742
2003	[96160] SWD;MESAVERDE	Apr	0	0	0	0	100892	0	0	0	1720
2003	[96160] SWD;MESAVERDE	May	0	0	0	0	106186	0	0	0	1740
2003	[96160] SWD;MESAVERDE	Jun	0	0	0	0	89020	0	0	0	1684
2003	[96160] SWD;MESAVERDE	Jul	0	0	0	0	90549	0	0	0	1697
2003	[96160] SWD;MESAVERDE	Aug	0	0	0	0	89011	0	0	0	1686
2003	[96160] SWD;MESAVERDE	Sep	0	0	0	0	93938	0	0	0	1694

2003	[96160] SWD;MESAVERDE	Oct	0	0	0	0	99047	0	0	0	1711
2003	[96160] SWD;MESAVERDE	Nov	0	0	0	0	93179	0	0	0	1694
2003	[96160] SWD;MESAVERDE	Dec	0	0	0	0	89963	0	0	0	1672
2004	[96160] SWD;MESAVERDE	Jan	0	0	0	0	91724	0	0	0	1664
2004	[96160] SWD;MESAVERDE	Feb	0	0	0	0	82956	0	0	0	1626
2004	[96160] SWD;MESAVERDE	Mar	0	0	0	0	111372	0	0	0	1652
2004	[96160] SWD;MESAVERDE	Apr	0	0	0	0	91022	0	0	0	1644
2004	[96160] SWD;MESAVERDE	May	0	0	0	0	98046	0	0	0	1610
2004	[96160] SWD;MESAVERDE	Jun	0	0	0	0	75867	0	0	0	1665
2004	[96160] SWD;MESAVERDE	Jul	0	0	0	0	85751	0	0	0	1698
2004	[96160] SWD;MESAVERDE	Aug	0	0	0	31	83977	0	0	0	1748
2004	[96160] SWD;MESAVERDE	Sep	0	0	0	30	91395	0	0	0	1746
2004	[96160] SWD;MESAVERDE	Oct	0	0	0	31	119721	0	0	0	1726
2004	[96160] SWD;MESAVERDE	Nov	0	0	0	30	103945	0	0	0	1769
2004	[96160] SWD;MESAVERDE	Dec	0	0	0	31	94916	0	0	0	1722
2005	[96160] SWD;MESAVERDE	Jan	0	0	0	31	103455	0	0	0	1740
2005	[96160] SWD;MESAVERDE	Feb	0	0	0	28	86944	0	0	0	1780
2005	[96160] SWD;MESAVERDE	Mar	0	0	0	31	147419	0	0	0	1804
2005	[96160] SWD;MESAVERDE	Apr	0	0	0	30	111094	0	0	0	1769
2005	[96160] SWD;MESAVERDE	May	0	0	0	31	109436	0	0	0	1777
2005	[96160] SWD;MESAVERDE	Jun	0	0	0	30	93384	0	0	0	1848
2005	[96160] SWD;MESAVERDE	Jul	0	0	0	31	101300	0	0	0	1900
2005	[96160] SWD;MESAVERDE	Aug	0	0	0	31	102739	0	0	0	1928
2005	[96160] SWD;MESAVERDE	Sep	0	0	0	30	115261	0	0	0	1895
2005	[96160] SWD;MESAVERDE	Oct	0	0	0	31	106593	0	0	0	1912
2005	[96160] SWD;MESAVERDE	Nov	0	0	0	30	125209	0	0	0	1892
2005	[96160] SWD;MESAVERDE	Dec	0	0	0	31	98452	0	0	0	1825
2006	[96160] SWD;MESAVERDE	Jan	0	0	0	31	107948	0	0	0	1820
2006	[96160] SWD;MESAVERDE	Feb	0	0	0	28	118871	0	0	0	1750
2006	[96160] SWD;MESAVERDE	Mar	0	0	0	31	137366	0	0	0	1766
2006	[96160] SWD;MESAVERDE	Apr	0	0	0	30	124431	0	0	0	1748
2006	[96160] SWD;MESAVERDE	May	0	0	0	31	95289	0	0	0	1721
2006	[96160] SWD;MESAVERDE	Jun	0	0	0	30	91177	0	0	0	1740
2006	[96160] SWD;MESAVERDE	Jul	0	0	0	31	100780	0	0	0	1772
2006	[96160] SWD;MESAVERDE	Aug	0	0	0	31	119496	0	0	0	1881
2006	[96160] SWD;MESAVERDE	Sep	0	0	0	30	120303	0	0	0	1852
2006	[96160] SWD;MESAVERDE	Oct	0	0	0	31	128343	0	0	0	1752
2006	[96160] SWD;MESAVERDE	Nov	0	0	0	30	174366	0	0	0	1796
2006	[96160] SWD;MESAVERDE	Dec	0	0	0	0	114119	0	0	0	1725
2007	[96160] SWD;MESAVERDE	Jan	0	0	0	0	97875	0	0	0	0
2007	[96160] SWD;MESAVERDE	Feb	0	0	0	28	98184	0	0	0	1782
2007	[96160] SWD;MESAVERDE	Mar	0	0	0	31	159380	0	0	0	1817
2007	[96160] SWD;MESAVERDE	Apr	0	0	0	30	138119	0	0	0	1812
2007	[96160] SWD;MESAVERDE	May	0	0	0	31	130501	0	0	0	1827
2007	[96160] SWD;MESAVERDE	Jun	0	0	0	0	141606	0	0	0	1830
2007	[96160] SWD;MESAVERDE	Jul	0	0	0	0	121710	0	0	0	1796
2007	[96160] SWD;MESAVERDE	Aug	0	0	0	31	136497	0	0	0	1799
2007	[96160] SWD;MESAVERDE	Sep	0	0	0	30	141322	0	0	0	1800
2007	[96160] SWD;MESAVERDE	Oct	0	0	0	0	0	0	0	0	0
2007	[96160] SWD;MESAVERDE	Nov	0	0	0	0	135576	0	0	0	1783
2007	[96160] SWD;MESAVERDE	Dec	0	0	0	0	127294	0	0	0	1780
2008	[96160] SWD;MESAVERDE	Jan	0	0	0	0	97672	0	0	0	1720
2008	[96160] SWD;MESAVERDE	Feb	0	0	0	0	105720	0	0	0	1731
2008	[96160] SWD;MESAVERDE	Mar	0	0	0	0	169903	0	0	0	1794
2008	[96160] SWD;MESAVERDE	Apr	0	0	0	0	0	0	0	0	0
2008	[96160] SWD;MESAVERDE	May	0	0	0	0	129642	0	0	0	1749
2008	[96160] SWD;MESAVERDE	Jun	0	0	0	0	9948785	0	0	0	1760
2008	[96160] SWD;MESAVERDE	Jul	0	0	0	31	129299	0	0	0	0
2008	[96160] SWD;MESAVERDE	Aug	0	0	0	31	140888	0	0	0	0

2008	[96160] SWD;MESAVERDE	Sep	0	0	0	30	0	0	0	0	0
2008	[96160] SWD;MESAVERDE	Oct	0	0	0	31	13764	0	0	0	0
2008	[96160] SWD;MESAVERDE	Nov	0	0	0	30	39016	0	0	0	0
2008	[96160] SWD;MESAVERDE	Dec	0	0	0	31	50636	0	0	0	0
2009	[96160] SWD;MESAVERDE	Jan	0	0	0	31	34961	0	0	0	0
2009	[96160] SWD;MESAVERDE	Feb	0	0	0	28	48291	0	0	0	0
2009	[96160] SWD;MESAVERDE	Mar	0	0	0	31	84048	0	0	0	0
2009	[96160] SWD;MESAVERDE	Apr	0	0	0	30	70022	0	0	0	0
2009	[96160] SWD;MESAVERDE	May	0	0	0	31	62236	0	0	0	0
2009	[96160] SWD;MESAVERDE	Jun	0	0	0	30	50791	0	0	0	0
2009	[96160] SWD;MESAVERDE	Jul	0	0	0	31	52114	0	0	0	0
2009	[96160] SWD;MESAVERDE	Aug	0	0	0	31	75049	0	0	0	0
2009	[96160] SWD;MESAVERDE	Sep	0	0	0	30	99110	0	0	0	0
2009	[96160] SWD;MESAVERDE	Oct	0	0	0	31	105119	0	0	0	0
2009	[96160] SWD;MESAVERDE	Nov	0	0	0	30	103733	0	0	0	0
2009	[96160] SWD;MESAVERDE	Dec	0	0	0	31	0	0	0	0	0
2010	[96160] SWD;MESAVERDE	Jan	0	0	0	31	80174	0	0	0	0
2010	[96160] SWD;MESAVERDE	Feb	0	0	0	28	0	0	0	0	0
2010	[96160] SWD;MESAVERDE	Mar	0	0	0	31	0	0	0	0	0
2010	[96160] SWD;MESAVERDE	Apr	0	0	0	30	99306	0	0	0	0
2010	[96160] SWD;MESAVERDE	May	0	0	0	31	94954	0	0	0	0
2010	[96160] SWD;MESAVERDE	Jun	0	0	0	30	69711	0	0	0	1876
2010	[96160] SWD;MESAVERDE	Jul	0	0	0	31	75624	0	0	0	1752
2010	[96160] SWD;MESAVERDE	Aug	0	0	0	31	119893	0	0	0	0
2010	[96160] SWD;MESAVERDE	Sep	0	0	0	30	120632	0	0	0	0
2010	[96160] SWD;MESAVERDE	Oct	0	0	0	31	67915	0	0	0	0
2010	[96160] SWD;MESAVERDE	Nov	0	0	0	30	107618	0	0	0	0
2010	[96160] SWD;MESAVERDE	Dec	0	0	0	31	82499	0	0	0	0
2011	[96160] SWD;MESAVERDE	Jan	0	0	0	31	15215	0	0	0	0
2011	[96160] SWD;MESAVERDE	Feb	0	0	0	28	2115	0	0	0	0
2011	[96160] SWD;MESAVERDE	Mar	0	0	0	31	9019	0	0	0	0
2011	[96160] SWD;MESAVERDE	Apr	0	0	0	30	45923	0	0	0	0
2011	[96160] SWD;MESAVERDE	May	0	0	0	31	34270	0	0	0	0
2011	[96160] SWD;MESAVERDE	Jun	0	0	0	30	31789	0	0	0	0
2011	[96160] SWD;MESAVERDE	Jul	0	0	0	31	19781	0	0	0	0
2011	[96160] SWD;MESAVERDE	Aug	0	0	0	31	29790	0	0	0	1420
2011	[96160] SWD;MESAVERDE	Sep	0	0	0	30	0	0	0	0	1509
2011	[96160] SWD;MESAVERDE	Oct	0	0	0	31	47990	0	0	0	1550
2011	[96160] SWD;MESAVERDE	Nov	0	0	0	30	48422	0	0	0	1760
2011	[96160] SWD;MESAVERDE	Dec	0	0	0	31	36675	0	0	0	1700
2012	[96160] SWD;MESAVERDE	Jan	0	0	0	31	370000	0	0	0	1580
2012	[96160] SWD;MESAVERDE	Feb	0	0	0	29	40693	0	0	0	1440
2012	[96160] SWD;MESAVERDE	Mar	0	0	0	31	31223	0	0	0	1750
2012	[96160] SWD;MESAVERDE	Apr	0	0	0	30	36495	0	0	0	1780
2012	[96160] SWD;MESAVERDE	May	0	0	0	31	9530	0	0	0	1560
2012	[96160] SWD;MESAVERDE	Jun	0	0	0	30	21252	0	0	0	1650
2012	[96160] SWD;MESAVERDE	Jul	0	0	0	31	13608	0	0	0	1800
2012	[96160] SWD;MESAVERDE	Aug	0	0	0	31	37685	0	0	0	1740
2012	[96160] SWD;MESAVERDE	Sep	0	0	0	30	33244	0	0	0	1600
2012	[96160] SWD;MESAVERDE	Oct	0	0	0	31	41900	0	0	0	1650
2012	[96160] SWD;MESAVERDE	Nov	0	0	0	30	51244	0	0	0	1690
2012	[96160] SWD;MESAVERDE	Dec	0	0	0	31	34791	0	0	0	1650
2013	[96160] SWD;MESAVERDE	Jan	0	0	0	31	17752	0	0	0	1750
2013	[96160] SWD;MESAVERDE	Feb	0	0	0	28	9568	0	0	0	1361
2013	[96160] SWD;MESAVERDE	Mar	0	0	0	31	5132	0	0	0	1615
2013	[96160] SWD;MESAVERDE	Apr	0	0	0	30	0	0	0	0	0
2013	[96160] SWD;MESAVERDE	May	0	0	0	31	0	0	0	0	0
	Grand Totals					**5447**	**27746479**				**225014**

2013 AOR

AREA OF REVIEW
UNIT LETTERS ENCOMPASSED BY THE 1-MILE AOR

Item 7b1

Sec	TWN	RNG	UL	
1	29N	12W	DELM	
2	29N	12W	ALL	
3	29N	12W	ABCFGHIJKOP	
10	29N	12W	AB	
11	29N	12W	ABCDEF	
34	30N	12W	AGHIJKNOP	
35	30N	12W	DEFGHIJKLMNOP	
36	30N	12W	LM	


34; T30N.R12W
35; T30N.R12W
36; T30N.R12W
3004520140
Type: G
3004508945
Type: G
3004508950
Type: G
3004508946
Type: G
3004524037
Type: G
3004533580
Type: G
3004508839
Type: G
3004508844
Type: G
3004508823
Type: G
3004528653
Type: S
3004532241
Type: G
3004508851
Type: G
3004534346
Type: G
3004508793
Type: G
3004508797
Type: G
03; T29N.R12W
02; T29N.R12W
01; T29N.R12W
3004508712
Type: G
3004508709
Type: G
3004508714
Type: G
3004508713
Type: G
3004530486
Type: G
3004526214
Type: G
3004532346
Type: G
3004531580
Type: G
3004533573
Type: G
3004523758
Type: G
3004531581
Type: G
3004513092
Type: G
3004508615
Type: G
3004522118
Type: G
3004508612
Type: G
3004532665
Type: G
3004524447
Type: G
3004508558
Type: G
3004529945
Type: G
3004524283
Type: G
200 m
1000 ft

#7a1-a8

www.source3.com

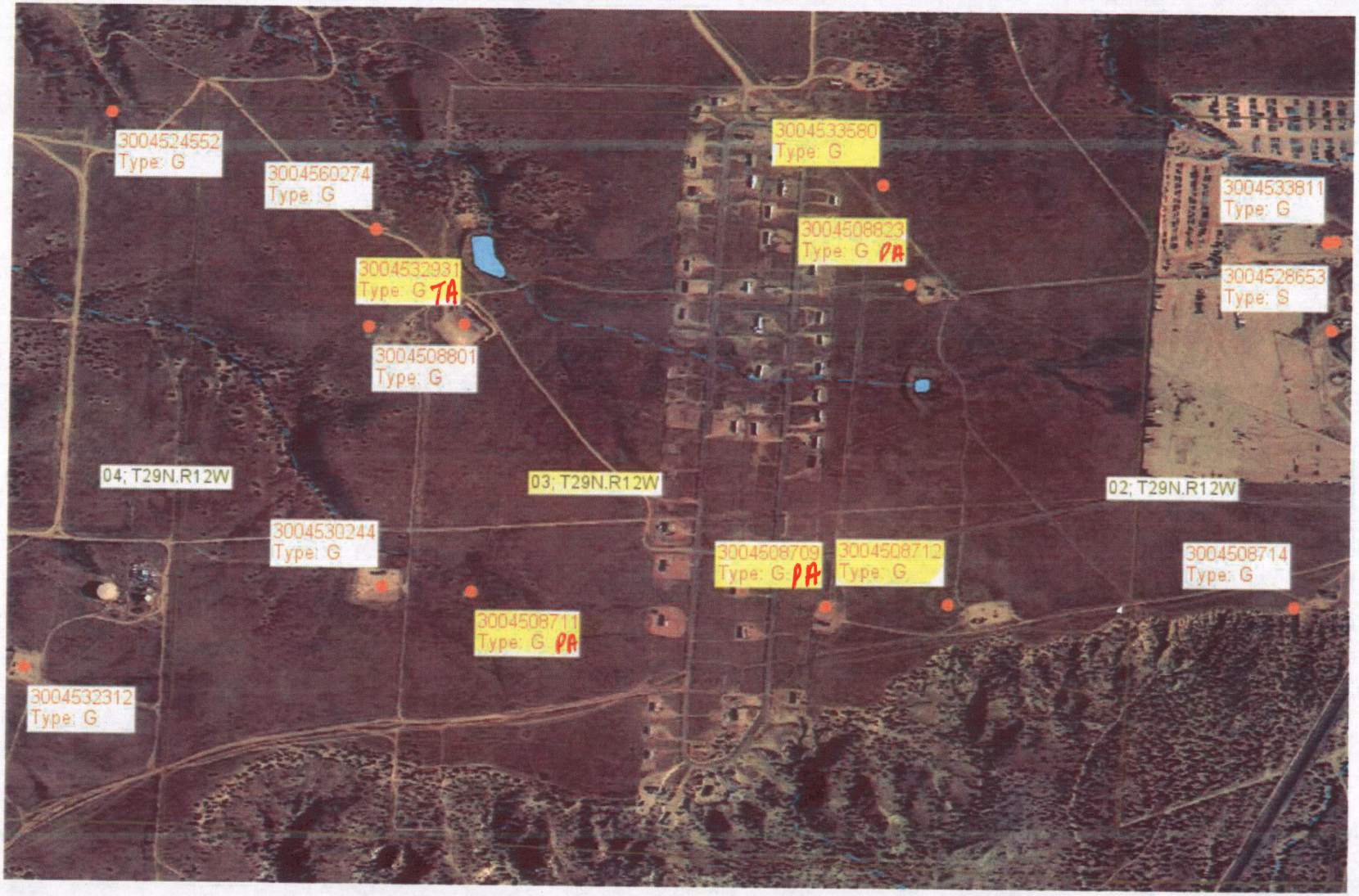
Petroleum Recovery Research Center	S2 T29N R12W	Figure: A1
	Sunco Disposal #1 AOR	Jan 25, 2012

Distance (ft): 200 300 500 1000

0 500 1000ft

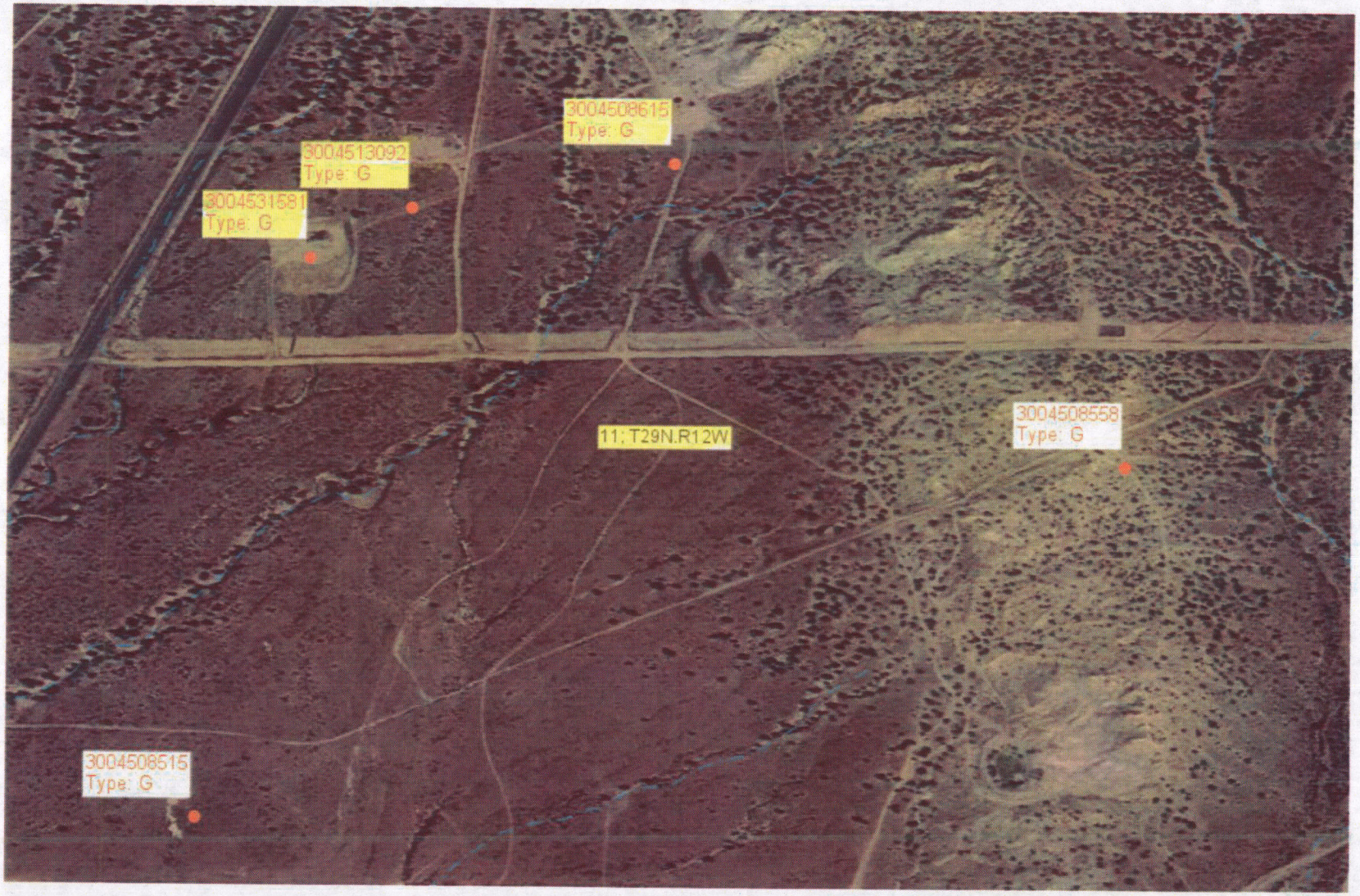
N W E S

Petroleum Recovery Research Center	S1 T29N R12W	Figure: A2
	Sunco Disposal #1 AOR	Jan 25, 2012



Petroleum Recovery Research Center	S3 T29N R12W	Figure: A3
	Sunco Disposal #1 AOR	Jan 25, 2012

Petroleum Recovery Research Center	S10 T29N R12W	Figure: A4
	Sunco Disposal #1 AOR	Jan 25, 2012

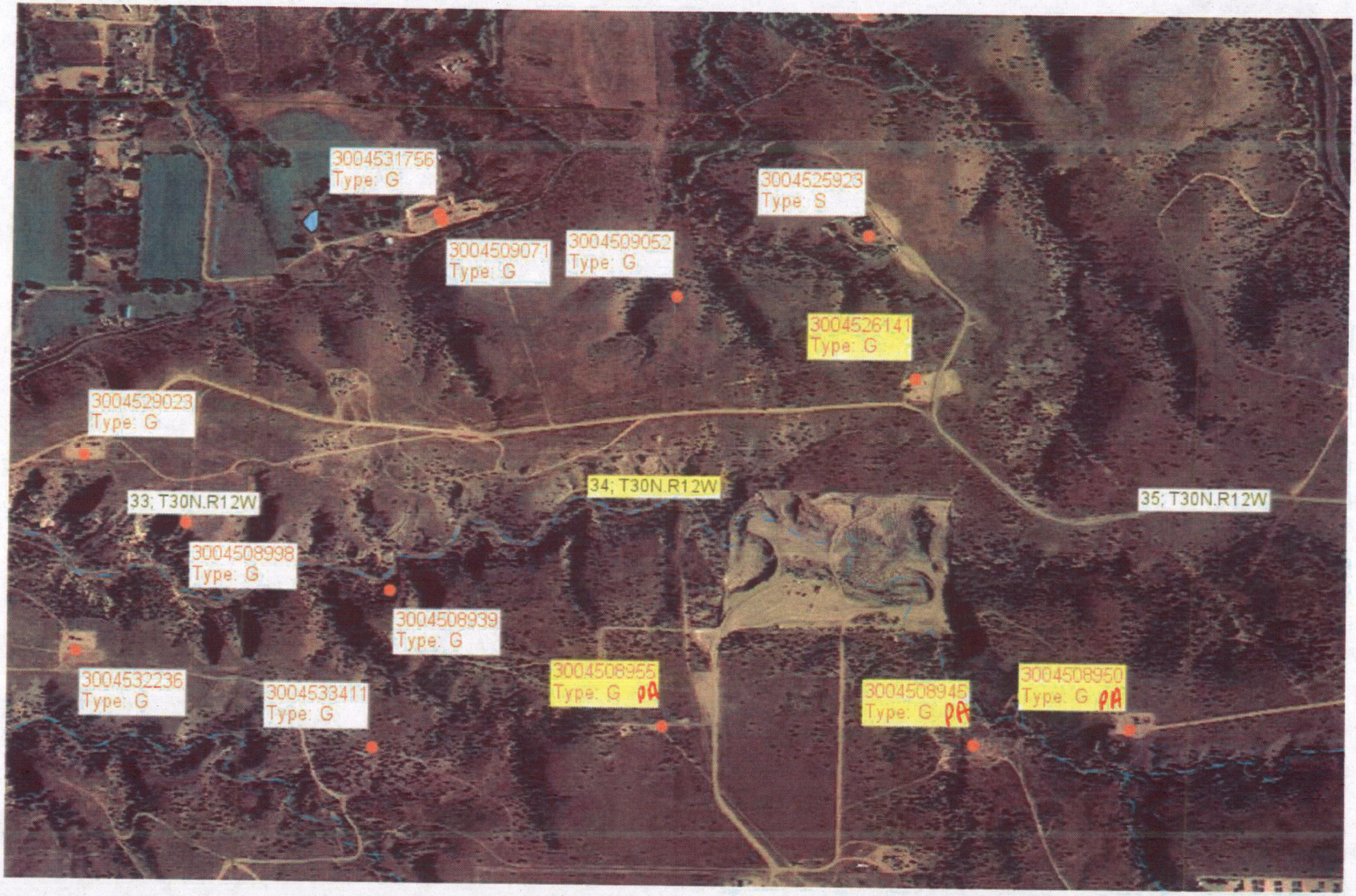


Distance (ft): 200 300 500 1000

0 200 400ft

N W E S

Petroleum Recovery Research Center	S11 T29N R12W	Figure: A5
	Sunco Disposal #1 AOR	Jan 25, 2012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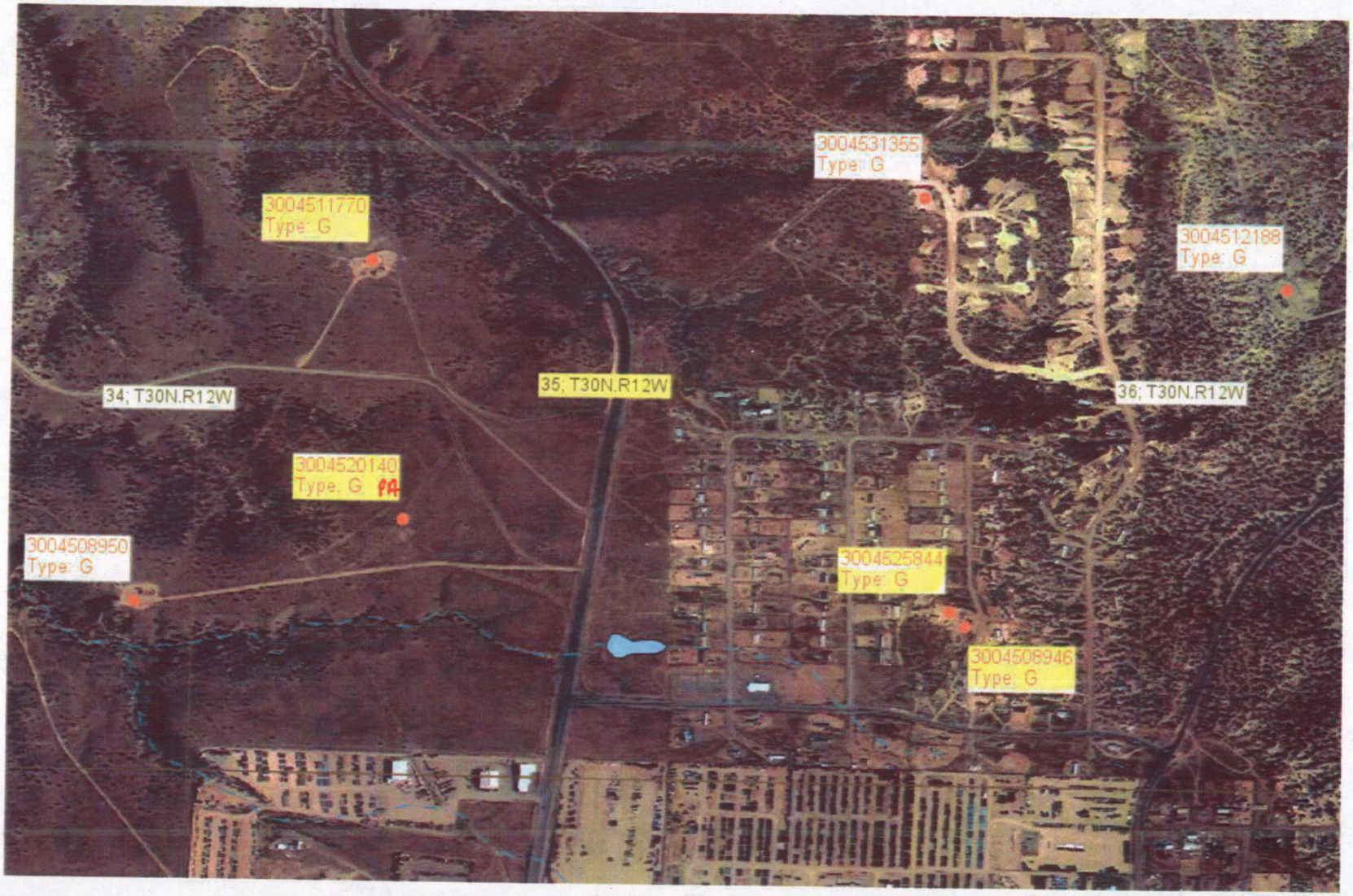
Type: G
3004525923
Type: S
3004509071
Type: G
3004509052
Type: G
3004526141
Type: G
3004529023
Type: G
34; T30N.R12W
35; T30N.R12W
33; T30N.R12W
3004508998
Type: G
3004508939
Type: G
3004532236
Type: G
3004533411
Type: G
3004508955
Type: G PA
3004508945
Type: G PA
3004508950
Type: G PA
Distance (ft): 200 300 500 1000
0 500 1000ft
N
W
E
S
Petroleum Recovery Research Center
S34 T30N R12W
Sunco Disposal #1 AOR
Figure: A6
Jan 25, 2012

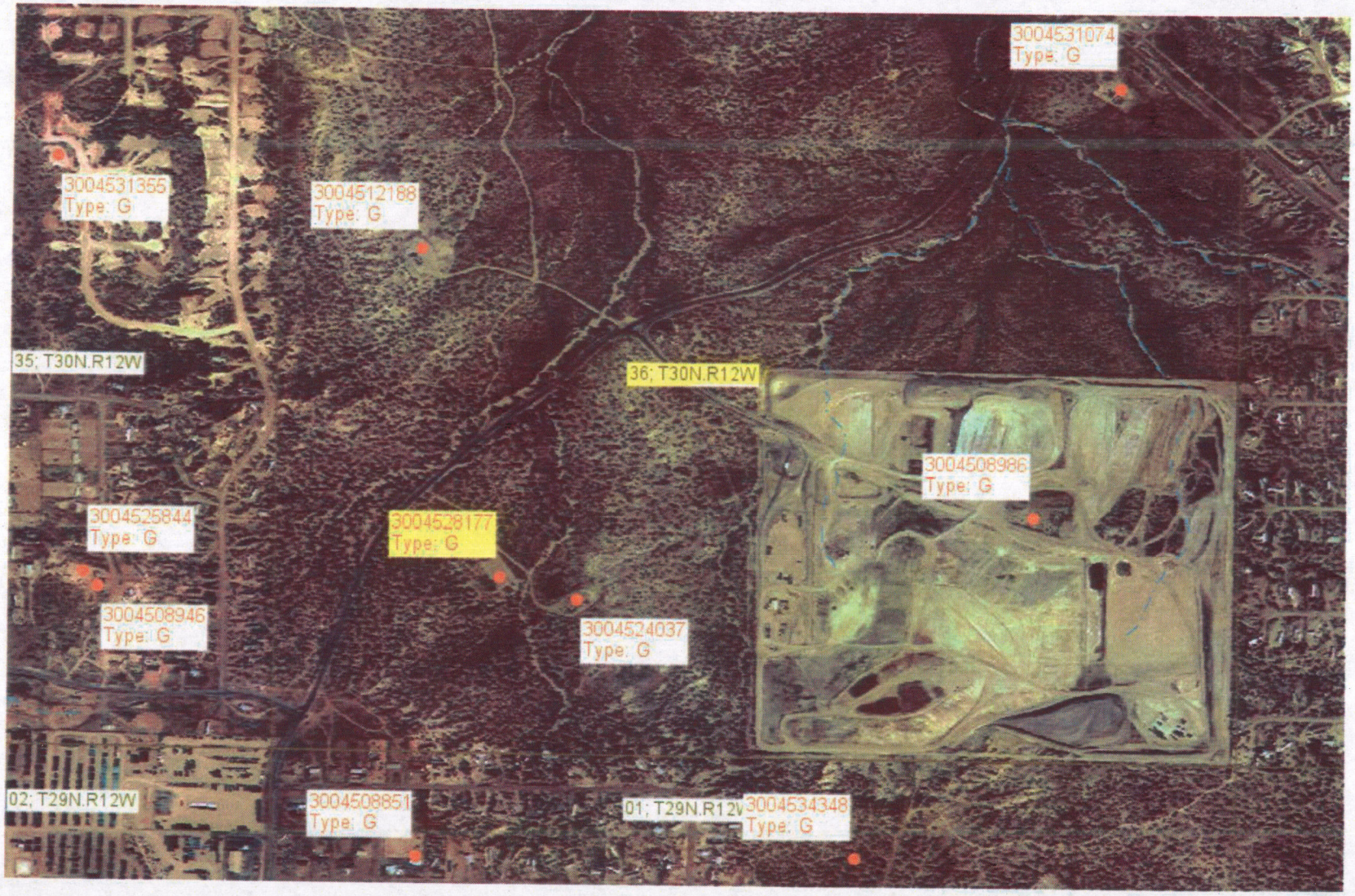


Distance (ft): 200 300 500 1000

0 500 1000ft

N W E S

Petroleum Recovery Research Center	S35 T30N R12W	Figure: A7
	Sunco Disposal #1 AOR	Jan 25, 2012



Petroleum Recovery Research Center	S36 T30N R12W	Figure: A8
	Sunco Disposal #1 AOR	Jan 25, 2012

AOR Sunco Disposal #1 updated 7/15/2013

Item 7b2													Surface Casing			INT Casing			Production Casing		
API	Well Name	Well #	Current Operator	Type	Lease	Status	Sec	TWN	RNG	UL	Spud Date	TD	size	depth	Sacks TOC	size	depth	Sacks TOC	size	depth	Sacks T
30-045-08851	ALLEN A	#001	BP America	Gas	Private	Active	1	29N	12W	D	3/12/1961	6785	8.265	264	200 surf				4.5	6785	300 su
30-045-26214	ALLEN A	#001E	BP America	Gas	Federal	Active	1	29N	12W	L	3/22/1985	5825	8.625	318	225 surf				5.5	6622	820 su
30-045-32346	CORNELL	#002R	Energen Resources	Gas	Federal	Active	1	29N	12W	M	7/22/2004	2152	7	137	90 surf				4.5	2151	310 su
30-045-08656	Cornell	2	Energen Resources	Gas	Federal	Plugged	1	29N	12W	M	10/2/1955	1996	8.625	97	75 surf				5.5	1950	100 su
30-045-08793	Pre-Ongard		Southern union	Gas	Private	Plugged	1	29N	12W	E	3/16/1948	2125									
30-045-32241	BECK	#001R	Burlington	Gas	Private	Active	2	29N	12W	G	12/1/2004	2225	7	135	34 surf				4.5	2221	262 su
30-045-33811	BECK	#001S	Burlington	Gas	Private	Active	2	29N	12W	D	8/17/2006	2200	7	162	85 surf				4.5	2195	255 su
30-045-31580	CORNELL COM	#500	Burlington	Gas	Federal	Active	2	29N	12W	N	7/14/2003	2136	7	139	44 surf	6.25	2126		4.5	2126	258 su
30-045-33573	CORNELL COM	#500S	Burlington	Gas	Private	Plugged	2	29N	12W	P	3/18/2006	2210	7	132	34 surf	6.25	2210		4.5	2198	279 su
30-045-08714	CORNELL SRC	#007	Burlington	Gas	Federal	Active	2	29N	12W	L	7/29/1944	2107	16	42	10 surf	5.5	1978		3.5	2106	250 su
30-045-08844	KATTLER	#001	Burlington	Gas	Private	Plugged	2	29N	12W	C	1/26/1945	2069	10	846	surf	5.5	1960		3.5	2050	205 su
30-045-08704	MCGRATH B	#001	Burlington	Gas	Private	Active	2	29N	12W	J	11/19/1961	6720	8.625	318	225 surf				4.5	1865	1065 su
30-045-08713	McGrath SRC	#001	Burlington	Gas	Private	Plugged	2	29n	12w	j	7/7/1973	2136	13 & 10.75	550 & 864	2 sx mud 4 sx mud	8.625	1526	5 sx mud	5.50 & 3.50	2020 2136	12 sx mu 140 su
30-045-30486	MCGRATH SRC	#001R	Burlington	Gas	Private	Plugged, Not Released	2	29N	12W	J	3/23/2001	2235	8.625	53	12 surf				2.875	2228	425 su
30-045-08797	Pre-Ongard		Southland	Gas	Private	Plugged	2	29n	12w	g	4/14/1948	2125									
30-045-28653	SUNCO DISPOSAL	#001	Agua Moss	Salt Water Disposal	Private	Active	2	29N	12W	E	1/28/1992	4760	8.625	209	150 surf				5.5	4760	1010 su
30-045-08839	YOUNG	#001	Burlington	Gas	Private	Active	2	29N	12W	D	8/1/1961	6740	8.625	307	275 surf				4.5	6739	700 su
30-045-08709	MCGRATH	#003	Burlington	Gas	Private	Plugged	3	29N	12W	J	3/4/1945	2040	13.375	675	2 surf	8.625 INT 1 5.5 INT 2	1460 1928	4 surf 58 surf	3.5	2011	110 su
30-045-33580	MCGRATH	#003S	Burlington	Gas	Private	Active	3	29N	12W	B	7/13/2007	2132	7	218	150 surf				4.5	2112	289 su
30-045-08712	MCGRATH A	#001	Burlington	Gas	Private	Active	3	29N	12W	I	3/14/1964	6689	8.625	307	250 surf				4.5	6688	500 su
30-045-08711	Pre-Ongard		Union Texas	Gas	Private	Plugged	3	29N	12W	K	6/25/1955	1940									
30-045-32931	WALKER	#100S	Burlington	Gas	Private	TA'd 10/09	3	29N	12W	F	8/14/2005	2120	7	144	61 surf				4.5	2117	238 su

AOR Sunco Disposal #1 updated 7/15/2013

30-045-08823	Walker SRC	1	Burlington	Gas	Private	Plugged	3	29N	12W	G	2/25/1943	2050	16	21	20 surf	5.5	1930		3.5	2050	175 su
30-045-23889	BECK A	#001E	Burlington	Gas	Federal	Active	10	29N	12W	B	1/5/1981	6514	8.625	240	150 surf				4.5	6514	765 su
30-045-30381	CORNELL	#100	Burlington	Gas	Federal	Active	10	29N	12W	B	1/7/2003	1968	7	147	55 surf				4.5	1959	229 su
30-045-23758	Pre-Ongard		Southland	Gas	Federal	Plugged	10	29N	12W	A	12/19/1980	1870									
30-045-08615	CORNELL	#006	Burlington	Gas	Federal	Active	11	29N	12W	C	11/7/1955	1839	8.625	106	70 surf	5.5	1811		3.5	2022	181 su
30-045-31581	CORNELL	#101	Burlington	Gas	Federal	Active	11	29N	12W	D	10/7/2003	2008	7	140	35 surf				4.5	2000	270 su
30-045-13092	CORNELL C	#001	BP America	Gas	Federal	Active	11	29N	12W	D	12/6/1961	6604	8.625	250	150 surf				4.5	6604	300 su
30-045-26141	DUFF GAS COM	#001E	Burlington	Gas	Federal	Active	34	30N	12W	G	11/20/1984	6608	8.625	316	295 surf				4.5	6608	1000 su
30-045-08950	HUDSON	2	Burlington	Gas	Federal	Plugged	34	30N	12W	P	7/17/1946	2137	15.5	38	20 surf	10 & 8.625	1217 1618	99 surf	5.5	1961	40 su
30-045-08945	MCGRATH C	#001	Burlington	Gas	Federal	Plugged	34	30n	12W	p	2/7/1963	6637	8.625	323	225 surf				4.5	6637	925 su
30-045-08955	Pre-Ongard		Aztec O&G	Gas	Private	Plugged	34	30N	12W	N	11/1/1944	1965									
30-045-08946	CARNAHAN COM	#001	Holcomb Oil & Gas	Gas	Private	Active	35	30N	12W	P	12/19/1960	6778	8.625	301	200 surf				4.5	6760	445 su
30-045-25844	CARNAHAN COM	#002	Merrion Oil & Gas	Gas	Private	Active	35	30N	12W	P	6/15/1984	6780	8.625	230	170 surf				4.5	6777	1425 su
30-045-11770	HUDSON J	#003	Burlington	Gas	Federal	Active	35	30N	12W	E	7/22/1966	6750	8.625	306	250 surf				4.5	6750	750 su
30-045-20140	Pre-Ongard		Southland	Gas	Federal	Plugged	35	30N	12W	L	9/7/1967	DH									
30-045-28177	FC STATE COM	#024	Burlington	Gas	State	Active	36	30N	12W	M	10/9/1990	6608	8.625	316	250 surf				4.5	6609	6000 su