Key Energy Services, Inc.
Four Corners Division
P.O. Box 900
5651 US Highway 64
Farmington, NM 87499

Phone: 505-327-4935
Fax: 505-327-4962

April 19, 2001

Wayne Price
NMOCD
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

RE: Application for renewal of Key Energy Services Injection Well Discharge Plan UIC-CLI-005

Dear Mr. Price

Please find attached Application, Documentation and Filing Fee for renewal of our Discharge Plan.

If you require additional information, please contact me at the Office 505-334-6416 or the Facility at 505-334-6186.

Sincerely,

Michael Talovich
Facility Manager
Key Energy Services

cc: Mr. Hal Stone Key Energy

KEY ENERGY SERVICES, INC.
FOUR CORNERS DIVISION
5651 US HIGHWAY 64 PO BOX 905
FARMINGTON, NEW MEXICO 87499
(505) 327-4935

PNC BANK, NATIONAL ASSOCIATION
JEANNETTE, PA
60-1/32-433

No. **141398**

Check Date **4/19/2001**

PAY **One Hundred Dollars and No Cent**

$$100.00$$

DOLLAR ONE ZERO ZERO PERIOD ZERO ZERO

TO THE ORDER OF
NM ENRGY,MNRLS,& NAT RESC DEPT
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DRIVE
SANTA FE NM 87504

Ron Fellabaum

AUTHORIZED SIGNATURE IF OVER $10,000.00

⑈141398⑈ ⑆043301627⑆ 10044 18783⑈

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

State of New Mexico
Energy Minerals and Natural Resources

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

Revised January 24, 2001

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,GAS PLANTS, REFINERIES, COMPRESSOR, GEOTHERMAL FACILITES AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: Refer to next Page
2. Operator: _____

   Address: _____

   Contact Person: _____ Phone: _____
3. Location: _____/4 _____/4 Section _____ Township _____ Range _____

   Submit large scale topographic map showing exact location

4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

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

Name: MICHAEL TAFOVICH Title: manager

Signature: _____ Date: 4-18-2001

DISCHARGE PLAN APPLICATION **April 19, 2001**

1. Discharge Plan for Key Energy Services Disposal Well

2. Key Energy Services Inc. P.O. Box 900 Farmington, New Mexico 87499 Michael Talovich, 505-334-6186

3. Unit E; Section 2;Township 29N;Range 12W

4. Key Energy Services Inc. 505-327-0416 P.O. Box 900 Farmington NM 87499

5. On file with NMOCD included with 711 Surface permit application NM-01-0009

6. N/A

7. See latest Injection Well Quarterly Report (included)

8. Wastewater is pumped from the Evaporation Pond through an above ground pipelines which fills a tank located at the Injection pump area. The wastewater is then pulled from the tank and filtered and injected under pressure into the well
   Please find included copies of approved Discharge Plan UIC-CLI-005 and Permit Condition Amendment.

9. N/A

10. The Wastewater Disposal System is visually inspected at least 6 times per day , this includes: Unloading Area piping, Pond perimeter piping, Injection System feed pipeline, Injection System Tank and all piping related to Injection Pump and Well.
    All fluid is piped and stored above ground until fluid reaches the well bore. All Pump and Well pressures are recorded and kept at the Facility.

11. All spills will be reported pursuant to OCD Rule 116 including their cleanup in accordance of NMOCD guidelines.
Key Energy maintains spill clean up equipment on site. This allows swift response to any spills or leaks that could occur at the Facility.

12. Please find and refer to included copy of original Application for Disposal Well Modification from Class II to Class I.

13. See State of New Mexico One -Well Plugging Bond U 2723755
The remainder of the Facility will be closed under 711 Closure Guidelines as required by permit.

P 103 694 826

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to	Maryne Kelling
Street & Number	1220 S. St Francis Dr.
Post Office, State, & ZIP Code	Santa Fe, NM 87504
Postage	$ 1.60
Certified Fee	1.90
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.50
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$ 5.00
Postmark or Date	

PS Form 3800, April 1995

January 24, 2001 Fourth Quarter

Maryne J. Kieling
Environmental Geologist
New Mexico OCD
1220 S. St. Francis Dr
Santa Fe, New Mexico 87504

Denny Foust
Environmental Geologist
New Mexico OCD
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: Key Energy Quarterly Injection Well Report

Dear Maryne,

Please find attached our quarterly Injection Well Report for Key Disposal.
The following explaination is needed concerning Flow Rate and Annular Pressures.

On Flow Rates the average was based on a 16 hour day 7 days of the month. Also there were some days when there was little pump activity.

On Annular Pressures, the non-continuous pump activity had severely effected the backside pressures. So on a letter dated March 20, 1997 NMOCD granted Key (formally Sunco) a permit amendment pertaining to the annulus. This change in the permit is reflected in this quarter's report.

The Injection Water Analysis is also provided. If you require additional information, please contact me at the Office 334-9416 or the Facility at 334-6186.

Best Regards,

Michael Talovich
Disposal Manager
Key Energy Services

cc: Mr. Stone
Mr. Foust

KEY ENERGY DISPOSAL
P.O. BOX 900
FARMINGTON, N.M. 87499

MONTHLY INJECTION WELL REPORT

PERIOD 2000	INJECTION PRESSURES			FLOW RATES			'FLOW VOLUMES / DAY			'ANNULAR PRESSURES			CLASS 1 NON-HAZ
	MAX (PSI)	MIN (PSI)	AVG (PSI)	MAX (bbls)	MIN (bbls)	AVG (bbls)	MONTH(bbls)	'YTD (bbls)	LIFE OF WELL	MAX (PSI)	MIN (PSI)	AVG (PSI)	VOLUMES IN BARRELS
JAN	2100	1860	1980	3,050	987	2,467	76,491	76,491	4,145,197	0	0	0	6,160
FEB	2080	1860	1970	2,935	1,044	2,202	63,868	140,359	4,209,065	0	0	0	7,840
MAR	2130	1860	1995	2,847	1,005	2,214	68,633	208,992	4,277,698	0	0	0	11,520
APR	2160	1720	2040	3,040	1,219	2,416	72,468	281,460	4,350,016	0	0	0	10,400
MAY	2160	1860	2040	2,487	0	1,467	45,466	326,926	4,395,482	0	0	0	6,480
JUN	2160	1860	2040	2,942	741	2,077	62,298	389,224	4,457,780	0	0	0	2,520
JUL	2160	1860	2040	2,960	1,368	1,857	57,561	446,785	4,515,341	0	0	0	480
AUG	2160	1860	2040	2,749	1,055	1,936	60,028	500,81	4,575,369	0	0	0	2,520
SEP	2180	1920	2050	2,890	700	1,902	57,064	557,877	4,632,433	0	0	0	1,200
OCT	2180	1920	2050	3,058	1,457	2,357	73,069	630,946	4,705,502	0	0	0	6,640
NOV	2180	1920	2050	3,076	0	2,150	62,366	693,312	4,767,862	0	0	0	3,720
DEC	2180	1920	2050	3,159	0	2,661	79,857	773,169	4,847,719	0	0	0	6,320

CERTIFICATION _____ DATE 1-24-2001

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

January 24, 2001

Mr. Mike Talovich
Key Energy Service, Inc.
P.O. Box 900
Farmington NM 87499

Phone: (505) 327-0416

Client No.: 98065-001
Job No.: 806501

Dear Mr. Talovich,

Enclosed are the analytical results for the sample collected from the location designated as "Injection Well". One water sample was collected by Key Energy Service designated personnel on 1/16/01, and received by the Envirotech laboratory on 1/16/01 TCLP W/O Herbicides and Pesticides.

The sample was documented on Envirotech Chain of Custody No. 8467. The sample was assigned Laboratory No. 19099 (Injection Well) for tracking purposes.

The sample was analyzed 1/17/01 through 1/23/01 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

CMW/cmw

C:/files/labreports/key.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy Services	Project #:	98065-001
Sample ID:	Injection Well	Date Reported:	01-22-01
Lab ID#:	19099	Date Sampled:	01-16-01
Sample Matrix:	Water	Date Received:	01-16-01
Preservative:	Cool	Date Analyzed:	01-17-01
Condition:	Cool and Intact	Chain of Custody:	8467

Parameter	Result	
IGNITABILITY:	Negative	
CORRCSIVITY:	Negative	pH = 8.45
REACT VITY:	Negative	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR. Subpart C. Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.*
CORRCSIVITY:	Characteristic of Corrosivity as defined by 40 CFR. Subpart C. Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR. Subpart C. Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*
Reference:	40 CFR part 261 Subpart C sections 261.21 - 261.23. July 1, 1992.
Comments:	Injection Well.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Key Energy Services	Project #:	98065-001
Sample ID:	Injection Well	Date Reported:	01-23-01
Laboratory Numbe :	19099	Date Sampled:	01-16-01
Chain of Custody:	8467	Date Received:	01-16-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-22-01
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroet ıene	ND	0.0001	0.7
2-Butanone (MEK)	0.180	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.263	0.0001	0.5
1,2-Dichloroet ıane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethiene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	98%
	Bromofluorobenzene	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS

Client:	Key Energy Services	Project #:	98065-001
Sample ID:	Injection Well	Date Reported:	01-23-01
Laboratory Number:	19099	Date Sampled:	01-16-01
Chain of Custody:	8467	Date Received:	01-16-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-23-01
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste. SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction. Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste. SW-846. USEPA. Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Key Energy Services	Project #:	98065-001
Sample ID:	Injection Well	Date Reported:	01-23-01
Laboratory Number:	19099	Date Sampled:	01-16-01
Chain of Custody:	8487	Date Received:	01-16-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-23-01
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.059	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	0.043	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	95%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Injection Well.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy Services	Project #:	98065-001
Sample ID:	Injection Well	Date Reported:	01-22-01
Laboratory Number:	19099	Date Sampled:	01-16-01
Chain of Custody:	8467	Date Received:	01-16-01
Sample Matrix:	Water	Date Analyzed:	01-19-01
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	1.06	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.012	0.001	5.0
Lead	0.033	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Well.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	01-23-01
Laboratory Number	01-22-TCV	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-22-01
Condition:	N/A	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	100%
	Bromofluorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	01-23-01
Laboratory Number:	19099	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	01-22-01
Condition:	N/A	Date Extracted:	N/A

Parameter	Sample Result (mg/L)	Duplicate Sample Result (mg/L)	Detection Limits (mg/L)	Percent Difference
Vinyl Chloride	ND	ND	0.0001	0.0%
1,1-Dichloroethene	ND	ND	0.0001	0.0%
2-Butanone (MEK)	0.180	0.182	0.0001	1.5%
Chloroform	ND	ND	0.0001	0.0%
Carbon Tetrachloride	ND	ND	0.0001	0.0%
Benzene	0.263	0.260	0.0001	1.1%
1,2-Dichloroethane	ND	ND	0.0001	0.0%
Trichloroethene	ND	ND	0.0003	0.0%
Tetrachloroethene	ND	ND	0.0005	0.0%
Chlorobenzene	ND	ND	0.0003	0.0%
1,4-Dichlorobenzene	ND	ND	0.0002	0.0%

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spike	Date Reported:	01-23-01
Laboratory Number:	19099	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	01-22-01
Condition:	N/A	Date Extracted:	N/A

Parameter	Sample Result (mg/L)	Spike Added (mg/L)	Spiked Sample Result (mg/L)	Det. Limit (mg/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Vinyl Chloride	ND	0.050	0.0495	0.0001	99%	28-163
1,1-Dichloroethene	ND	0.050	0.0494	0.0001	99%	43-143
2-Butanone (MEK)	0.180	0.050	0.229	0.0001	100%	47-132
Chloroform	ND	0.050	0.0500	0.0001	100%	49-133
Carbon Tetrachloride	ND	0.050	0.0490	0.0001	98%	43-143
Benzene	0.263	0.050	0.313	0.0001	100%	39-150
1,2-Dichloroethane	ND	0.050	0.0490	0.0001	98%	51-147
Trichloroethene	ND	0.050	0.0495	0.0003	99%	35-146
Tetrachloroethene	ND	0.050	0.0495	0.0005	99%	26-162
Chlorobenzene	ND	0.050	0.0495	0.0003	99%	38-150
1,4-Dichlorobenzene	ND	0.050	0.0495	0.0002	99%	42-143

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report
Laboratory Blank

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	01-23-01
Laboratory Number:	01-23-TCA	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-23-01
Condition:	N/A	Analysis Requested:	TCLP

Analytical Results

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorophenol	98 %
	2,4,6-tribromophenol	99 %

References: Method 1311. Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste. SW-846. USEPA. July 1992.

Method 3510. Separatory Funnel Liquid-Liquid Extraction. Test Methods for Evaluating Solid Waste. SW-846. USEPA. July 1992.

Method 8040. Phenols. Test Methods for Evaluating Solid Waste. SW-846. USEPA. Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24. July 1, 1992.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	01-23-01
Laboratory Number:	01-22-TCA	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Date Analyzed:	01-23-01
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sect. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 19099.**

Analys: _____ Review _____

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	01-23-01
Laboratory Number	19099	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Date Analyzed:	01-23-01
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Detection Limit (mg/L)	Percent Difference
o-Cresol	ND	ND	0.020	0.0%
p,m-Cresol	ND	ND	0.040	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	0.0%
Pentachlorophenol	ND	ND	0.020	0.0%

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
	8040 Compounds	30.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	01-23-01
Laboratory Number:	01-23-TBN	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	01-23-01
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure. SW-846. USEPA. July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction. SW-846. USEPA. July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones. SW-846. USEPA. Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24. July 1, 1992.

Comments: **QA/QC for sample 19099.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	01-23-01
Laboratory Number:	01-22-TBN	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool and Intact	Date Analyzed:	01-23-01
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QA/QC Matrix Duplicate Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	01-23-01
Laboratory Number:	19099	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	01-23-01
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Percent Difference	Det. Limit (mg/L)
Pyridine	ND	ND	0.0%	0.020
Hexachloroethane	ND	ND	0.0%	0.020
Nitrobenzene	0.059	0.058	0.9%	0.020
Hexachlorobutadiene	ND	ND	0.0%	0.020
2,4-Dinitrotoluene	0.043	0.043	0.0%	0.020
HexachloroBenzene	ND	ND	0.0%	0.020

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Maximum Difference
	8090 Compounds	30%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 19099.

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-19-TCM QA/QC	Date Reported:	01-22-01
Laboratory Number:	19099	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	01-19-01
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	1.06	1.05	0.9%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.012	0.012	0.0%	0% - 30%
Lead	ND	ND	0.001	0.033	0.033	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.498	99.6%	80% - 120%
Barium	0.500	1.06	1.55	99.4%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	0.012	0.51	99.8%	80% - 120%
Lead	0.500	0.033	0.53	99.8%	80% - 120%
Mercury	0.050	ND	0.049	98.0%	80% - 120%
Selenium	0.500	ND	0.497	99.4%	80% - 120%
Silver	0.500	ND	0.498	99.6%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: QA/QC for sample 19099.

Analyst

Review

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CHAIN OF CUSTODY RECORD

08467

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
KEY ENERGY Services	Injection well	
Sampler: MIKE TALOVICH	Client No. 98065-001	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TCLP W/O H+P	Remarks
Injection well	1-16-01	1300	19099	H2O	5	✓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	1-16-01	1330	[signature]	1-16-01	1330
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

August 26, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-950

Mr. George Coleman
Colernan Oil and Gas, Inc.
P.O. Box 443
Farmington, New Mexico 87499

RE: **Approval of Discharge Plan UIC-CLI-005 (Formerly GW-235)**
Class I Non-Hazardous Oil Field Waste Disposal Well
Coleman Oil and Gas, Inc.
Sunco Disposal Well No. 1
Unit Letter E, Sec 2, Twn 29 N, Rng 12 W
San Juan County, New Mexico

Dear Mr. Coleman:

The discharge plan UIC-CLI-005 for the Coleman Oil and Gas (Coleman) Class I non-exempt non-hazardous oil field waste disposal well located in unit letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. The application consists of the original New Mexico Oil Conservation Division (OCD) Order SWD-457 issued January 13, 1992, the discharge plan application for a Class I disposal well dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

The discharge plan was submitted pursuant to Section 5101.B.3 of the New Mexico Water Quality Control Commission (WQCC) Regulations. It is approved pursuant to Sections 5101.A and 3109.C. Please note Sections 3109.E and 3109.F which provide for possible future amendments or modifications of the plan. Please be advised that approval of this plan does not relieve Coleman of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

The monitoring and reporting shall be as specified in the above referenced materials. Please note that Section 3104 of the regulations requires that when a plan has been approved, discharges must be consistent with the terms and conditions of the plan. Pursuant to Section 3107.C Coleman is required to notify the Director of any facility expansion, production increase, pressure increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.G.4, this plan is for a period of five (5) years. This approval will expire August 26, 2001, and Coleman should submit an application for renewal in ample time before this date. Note that under Section 5101.G of the regulations, if a discharger submits a discharge plan renewal application at least 180 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved.

The discharge plan application for the Coleman Class I non-hazardous oil field waste disposal well is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of $50 plus a flat fee of $1,380 for Class I injection wells. The OCD has not received the $50 filing fee or the $1,380 flat fee. The $50 dollar filing fee is due upon receipt of this approval. The flat fee of $1,380 may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: NMED-Water Quality Management and addressed to the OCD Santa Fe Office.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
Director

WJL/mwa
Attachment
xc: OCD Aztec Office
David Catanach, UIC Director, OCD Santa Fe

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL
COLEMAN OIL AND GAS, INC., CLASS I WELL
DISCHARGE PLAN REQUIREMENTS

1. Payment of Discharge Plan Fees: The $50 dollar filing fee is due upon receipt of this approval. The $1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.

3. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 psi in accordance with OCD Order SWD-457. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

   Coleman shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.

4. Mechanical Integrity Testing: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually and any time the tubing is pulled or the packer is reseated. A pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Coleman for the life of the well

5. Annulus: The casing-tubing annulus will be filled with an inert fluid and a minimum pressure of 100 psi maintained.

6. Continuous Monitoring and Recording: Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, and annular pressure. Mechanical charts are to be maintained at Coleman for the life of the well.

7. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.

8. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.

9. Chemical Analysis of Injection Fluids: The following analyses of injection fluids will be conducted on a quarterly basis:

   a. Aromatic and halogenated volatile hydrocarbon scan by either EPA method 8010/8020 or EPA method 8240.

   b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.

   c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).

   Records of all analyses will be maintained at Coleman for the life of the well.

10. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. and submitted quarterly to both the OCD Santa Fe and Aztec Offices:

    a. Results of the chemical analysis of the injection fluids (number 9).

    b. Monthly average, maximum and minimum values for injection pressures; flow rate and flow volume; and, annular pressure.

    c. Monthly volumes of injected Class I non-exempt non-hazardous oil field waste (OCD Form C-138).

11. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.

12. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

13. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

14. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.

15. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

16. Labeling. All tanks, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

17. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.

18. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

19. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Aztec District Office.

20. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.

21. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

22. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of the well. A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.

23. Closure: The OCD will be notified when operations of the well are discontinued for a period in excess of six months. Prior to closure of the well a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

24. Plugging Bond and /or Letter of Credit: Coleman shall have in effect, for the life of the well, a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation. The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal.

25. Training: All personnel associated with operations at the Coleman Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal. All training documentation shall be maintained at Coleman for the life of the well.

26. OCD Inspections: Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.

27. Certification: Coleman Oil and Gas, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman Oil and Gas, Inc. further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

COLEMAN OIL AND GAS, INC.

by George E. Coleman
Title President

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

March 20, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-920

Mr. George Coleman
Colernan Oil and Gas, Inc.
P.O. Box 443
Farmington, Nev/ Mexico 87499

RE: Discharg: Plan UIC-CLI-005
Permit Condition Amendment
Class I Non-Hazardous Oil Field Waste Disposal Well
Sunco Disposal Well No. 1
Eddy Co.nty, New Mexico

Dear Mr. Coleman:

Pursuant to the :equest received from Coleman Oil and Gas, Inc.(Coleman) on November 18, 1996, permit cor dition number 4 of the August 26, 1996 approval has been amended. Enclosed are two copies of the conditions of approval with the amended condition. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 10 working days of receipt of this letter.

Please be advised that the amendment of this plan does not relieve Coleman of liability should operations resul' in pollution of surface water, ground water, or the environment.

The OCD hopes that this has clarified your concern, and we appreciate your input into this process.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/mwa

xc: OCD Aztec Office

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL
COLEMAN OIL AND GAS, INC., CLASS I WELL
DISCHARGE PLAN REQUIREMENTS (AMENDED)
(March 20, 1997)

1. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.

2. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 psi in accordance with OCD Order SWD-457. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

   Coleman shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.

3. Mechanical Integrity Testing: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually and any time the tubing is pulled or the packer is reseated. A pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Coleman for the life of the well.

4. Annulus: Until the facility operates 24 hours per day, the casing-tubing annulus will be completely filled with an inert fluid and connected to a casing differential tank with the same inert fluid to maintain a constant casing-tubing fluid level in the annulus at all times. A sight glass will be installed on the casing differential tank to monitor and record, on a daily basis, for tubing or casing leaks. Once 24 hour operation begins, the casing-tubing annulus will be completely filled with an inert fluid and a minimum pressure of 100 psi maintained. Any loss or gain of inert fluid will be documented and reported to the OCD Aztec District Office immediately.

5. Continuous Monitoring and Recording: Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, and annular pressure. Mechanical charts are to be maintained at Coleman for the life of the well.

6. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.

7. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.

8. Chemical Analysis of Injection Fluids: The following analyses of injection fluids will be conducted on a quarterly basis:

   a. Aromatic and halogenated volatile hydrocarbon scan by either EPA method 8010/8020 or EPA method 8240.

   b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.

   c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).

   Records of all analyses will be maintained at Coleman for the life of the well.

9. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. and submitted quarterly to both the OCD Santa Fe and Aztec Offices:

   a. Results of the chemical analysis of the injection fluids (number 9).

   b. Monthly average, maximum and minimum values for injection pressures; flow rate and flow volume; and, annular pressure.

   c. Monthly volumes of injected Class I non-exempt non-hazardous oil field waste (OCD Form C-138).

10. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.

11. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

12. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

13. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.

14. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

15. Labeling: All tanks, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

16. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.

17. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

18. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Aztec District Office.

19. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.

20. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

21. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of the well. A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.

22. Closure: The OCD will be notified when operations of the well are discontinued for a period in excess of six months. Prior to closure of the well a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Plugging Bond and /or Letter of Credit: Coleman shall have in effect, for the life of the well, a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation. The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal.

24. Training: All personnel associated with operations at the Coleman Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal. All training documentation shall be maintained at Coleman for the life of the well.

25. Certification: Coleman, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

COLEMAN OIL AND GAS, INC.

by_____
Title

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL
COLEMAN OIL AND GAS, INC., CLASS I WELL
DISCHARGE PLAN REQUIREMENTS (AMENDED)
(March 20, 1997)

1. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.

2. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 psi in accordance with OCD Order SWD-457. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

   Coleman shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.

3. Mechanical Integrity Testing: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually and any time the tubing is pulled or the packer is reseated. A pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Coleman for the life of the well.

4. Annulus: Until the facility operates 24 hours per day, the casing-tubing annulus will be completely filled with an inert fluid and connected to a casing differential tank with the same inert fluid to maintain a constant casing-tubing fluid level in the annulus at all times. A sight glass will be installed on the casing differential tank to monitor and record, on a daily basis, for tubing or casing leaks. Once 24 hour operation begins, the casing-tubing annulus will be completely filled with an inert fluid and a minimum pressure of 100 psi maintained. Any loss or gain of inert fluid will be documented and reported to the OCD Aztec District Office immediately.

5. Continuous Monitoring and Recording: Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, and annular pressure. Mechanical charts are to be maintained at Coleman for the life of the well.

6. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.

7. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.

8. Chemical Analysis of Injection Fluids: The following analyses of injection fluids will be conducted on a quarterly basis:

   a. Aromatic and halogenated volatile hydrocarbon scan by either EPA method 8010/8020 or EPA method 8240.

   b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.

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Coleman shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

21. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of the well. A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.

22. Closure: The OCD will be notified when operations of the well are discontinued for a period in excess of six months. Prior to closure of the well a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Plugging Bond and /or Letter of Credit: Coleman shall have in effect, for the life of the well, a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation. The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal.

24. Training: All personnel associated with operations at the Coleman Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal. All training documentation shall be maintained at Coleman for the life of the well.

25. Certification: Coleman, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

COLEMAN OIL AND GAS, INC.

by_____
Title

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

MIKE T.

September 8, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-969

Mr. Kenneth V. Huseman
Key Energy Group, Inc.
6010 Hwy. 191, Suite 212
Odessa, TX 79762

RE: **Transfer of Sunco Trucking Water Disposal Co., Class I Non-Hazardous Disposal Well to Key Four Corners, Inc.**
SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM
San Juan County, New Mexico
Discharge Plan UIC-CLI-005

Dear Mr. Huseman:

The New Mexico Oil Conservation Division (OCD) has received the request from Key Four Corners, Inc. (Key) dated August 25, 1997 for the transfer of ownership of the Sunco Water Disposal Company Class I Non-Hazardous Disposal Well, Discharge Plan UIC-CLI-005, located in SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, to Key Four Corners, Inc. The request **is hereby approved** in accordance with Water Quality Control Commission Regulation 5101.I.

In addition, Key must file form C-104 with the OCD for a change of operator. A replacement bond reflecting the new operator must also be filed with the OCD. Until such financial assurance is in place, the transferor's (Sunco Water Disposal Company) financial assurance will not be released.

All modifications and alternatives to the approved disposal methods must receive prior OCD approval. Key is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised, approval of this transfer does not relieve Key of liability should their operation result in pollution of surface waters, ground water or the environment.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. Upon written application by the permittee, an exception to screening, netting, or covering may be granted by the district supervisor upon a showing that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoir, or in open receptacles.

If there are any questions, please contact Mark Ashley at (505) 827-7155.

Sincerely,

William J. LeMay
Director

WJL/mwa

xc: OCD Aztec Office
Mr. George E. Colman, Sunco Trucking Co.
CERTIFIED MAIL RETURN RECEIPT NO. P-288-258-970
Mr. Ron Fellabaum, Sunco Trucking Co./Key Four Corners, Inc.
CERTIFIED MAIL RETURN RECEIPT NO. P-288-258-971

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
PO BOX 2088
SANTA FE, NM 87504-2088

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ____ Secondary Recovery ____ Pressure Maintenance X Disposal ____ Storage
Application qualifies for administrative approval? X Yes ____ No

II. OPERATOR: Coleman Oil & Gas

ADDRESS: P.O. Box 443 Farmington, NM 87499

CONTACT PARTY: Chuck Badsgard PHONE: 327-0416

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

IV. Is this an expansion of an existing project: X Yes ____ No
If yes, give the Division order number authorizing the project #SWD-457

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 geological data on the injection zone including appropriate lithologic detail, geological 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/1 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 source 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: Chuck Badsgard TITLE: Vice-President

SIGNATURE: Chuck Badsgard DATE: 5/4/96

* 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 circumstance 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 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, PO Box 2088, Santa Fe, NM 87504-2088 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.

OIL CONSERVATION DIVISION
STATE OF NEW MEXICO
2040 S. PACHECO
SANTA FE NEW MEXICO 87505

APPLICATION FOR DISPOSAL WELL MODIFICATION FROM CLASS II TO CLASS I

COLEMAN OIL & GAS INC.
P.O. BOX 443
FARMINGTON NM 87499
ATTN: CHUCK BADSGARD
PHONE: 505-327-0416

PREPARED BY:
CREATIVE FUTURE TECHNOLOGIES
P.O. BOX 364
FARMINGTON NM 87499
PHONE: 505-632-0662

MAY 3, 1996

TABLE OF CONTENTS

I. Purpose

II. Operator Information

III. Well Data

IV. Expansion

V. Map of One Mile Radius

VI. Area of Review Well Data

VII. Proposed Operation

VIII. Injection Zone Data

IX. Stimulation Program

X. Well Test Data

XI. Fresh Water Data

XII. Affirmitive Statement & Contingency Plan

XIII. Proof of Notice

XIV. Certification

XV. Attachments

I. Purpose

This discharge plan proposes to reclassify the existing Coleman Oil and Gas disposal well from a Class II to a Class I facility. This will allow additional sources of Oil & Gas produced wastes at this commercial facility however shall still be RCRA exempt.

II. Operator

Coleman Oil & Gas
P.O. Box 443
Farmington NM 87499
Attn: Chuck Badsgard
Phone: 505-327-0416

III. Well Data

A. Description

1.) Lease name; Sunco Disposal Well#1
Location; Section 2, T29N, R12W
Drawing; See attached"Exhibit A"

2.) Casing and Cementing; surface casing is 8 5/8" 24# K-55 set at 209' in 12-1/2" hole with 150 sacks of B cement 2% $CACL_2$ and 1/4# flocel circulated back to surface taking 180 cubic feet, long string 5-1/2" 15.5# K-55 set at 4762' with DV tool at 2244.17' cementing; first stage with 230 sx 65/35 Pozmix, 6% gel 5# sx Gilsonite, 1/4# sx Celoflake, and tailed with 265 sx class"B" with 5# sx Gilsonite and 1/4# Celoflake; second stage was cemented with 465 sx 65/35 Pozmix 6% gel and tailed with 50 sx class "B" neat cement with 2% Calcium Chloride. See attached "Exhibit B #1

3.) Tubing Size and Depth; 2-7/8" J-55 8rd plastic lined set at 4281'; See attached "Exhibit B #2"

4.) Packer Information; 5-1/2' Arrow model XL-W retrievable seal bore with plastic coated bottom 2.688" seal bore set at 4282'

B. Formation

1.) Point Lookout 4380' to 4480'

2.) Interval perforated at 4350' to 4460' with 2 SPF and 220 holes; See attached"Exhibit C"

3.) Well was drilled for injection only.

4.) No other perforations.

5.) The depth of the next higher oil and gas producing zone is Pictured Cliffs at 2285'. and the next lower is the top of the Dakota at 6550'.

IV. Expansion of Existing Well

A. Currently operating under order #SWD-457

V. Map Identifying Leases

A. 1/2 Mile radius; See attached "Exhibit D"
B. One mile radius; See attached "Exhibit D"

VI. Area of Review Well Data

A. Chart; See attached "Exhibit E"
B. Hydrogeological Calculation; See attached "Exhibit F"

VII. Proposed Operation

1.) Injection rate; 2000-2800 BPD
2.) System; open
3.) Injection pressure; 2850 PSI; See attached "Exhibit G"
4.) Water sources shall include Oil & Gas produced Class I non-hazardous RCRA exempt; See attached "Exhibit H"
5.) Injection zone does not produce oil and gas and has an estimated TDS of 17,180 MG/L based on an analysis taken from the McGrath #4 well located in Unit B, Section 34, T30N, R12W; See attached "Exhibit I"

VIII. Injection Zone Data

The injection zone is the Point Lookout Sandstone of the Mesa Verde formation. It is a light to medium

gray angular to subangular, very fine grained sandstone with laminations of light to dark gray carbonaceous shale. It has a maximum porosity of 13 to 14% with an average of 10%. The average thickness is 100 feet and is at the depth of 4380' to 4480'. The underground water sources are the Nacimiento which is exposed at the surface and the Ojo Alamo which occurrs from 500' to 700'; See attached "Exhibit J"

IX. Stimulation Program

The proposed stimulation program is to breakdown the perforated interval 4380' to 4480' with 5,000 to 7,500 gallons of 15% HCL and ball sealers.

X. Well Test Data

This data has previously been submitted.

XI. Fresh Water Data

The State Engineers Office shows one water well within one mile of the proposed well which was drilled in the SE,SE of Section 34,T30N,R12W in 1977 and was capped with a welded steel plate. There is no current information availible.

XII. Affirmative Statement & Contingency Plan

We have examined the geologic data availible and there is no apparent evidence of open faults or any other hydrologic connection between the Point Lookout formation and any underground source of drinking water.

In the accidental event of the cross transfer of disposed waters and fresh water the source will be stopped immediatly upon detection and take the steps necessary to provide the extraction and monitoring equipment.

XIII. Proof of Notification

The public notice was previously listed: See attached "Exhibit K"

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: Chuck Badgard TITLE: Vice-President

SIGNATURE: Chuck Badgard DATE: 5/6/96

ATTACHMENTS

Exhibit A

Exhibit B #1

Exhibit B #2

Exhibit C

Exhibit D

Exhibit E

Exhibit F

Exhibit G

Exhibit H

Exhibit I

Exhibit J

Exhibit K

Lease - 4 copies
Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
COLEMAN ~~DRILLING~~ OIL & GAS	Sunco Disposal	1

Unit Letter	Section	Township	Range	County
E	2	29N	12W NMPM	SAN JUAN

Actual Footage Location of Well:
1595 feet from the NORTH line and 1005 feet from the WEST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
5859	MV	Flora Vista	N/A Acres

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

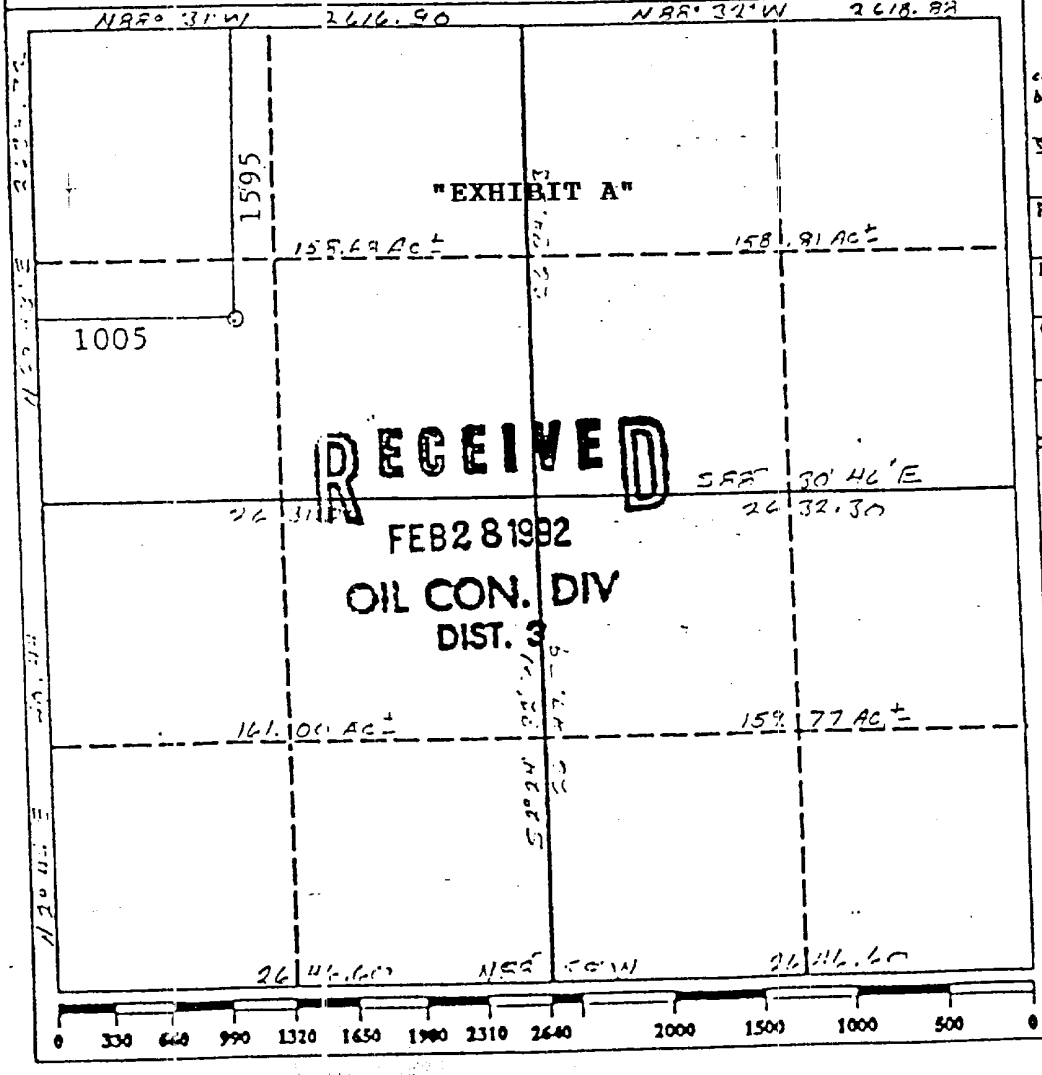
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

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

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

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



RECEIVED
FEB 28 1992
OIL CON. DIV.
DIST. 3

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

Signature: Ron Mahan
Printed Name: RON MAHAN
Position: CONTRACTS MGR
Company: COLEMAN O&G
Date: 2/28/92

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

June 4, 1991
Date Surveyed
Signature & Seal of Professional Surveyor: Gerald B. Tullis, New Mexico, 9672, Registered Professional Land Surveyor
Certificate No. 9672

Coleman Oil & Gas
Surco Well #1
Unit E, Section 2, T29N, R12W
San Juan County, New Mexico

DRILLING HISTORY

02-02-92 Ran 138 jts 15.5# K-55 ST&C and LT&C casing measuring 4768.40' and landed at 4762' KB. Ran centralizers mid first joint, top of 3rd, 5th, 7th, 9th, 11th, 67th, and 69th joints. DV tool was run in top of 68th joint and is at 2244.17' KB. Ran cement basket above and below DV tool. Rig up Western Company and cemented 1st stage with 230 sx 65/35 Pozmix, 6% gel, 5 #/sx gilsonite, and 1/4#/sx celoflake and tailed in with 265 sx Class "B" with 5 #/sx gilsonite and 1/4#/sx celoflake. Preceded job with 20 bbls mud flush. Full returns throughout job. Bumped plug with 1500 psi at 4:00 p.m. Dropped bomb and opened Baker DV tool with 500 psi. Circulated out good amount of cement from above DV tool. Waited 4 hrs and cemented 2nd stage with 465 sx 65/35 Pozmix, 6% gel and tailed in with 50 sx Class "B" neat cement with 2% calcium chloride. Preceded job with 20 bbls mud flush. Full returns through job, circulated 25 bbls good cement to surface. Tool closed with 2500 psi and held good. Plug down 9:05 p.m. Set slips and cut off casing.

Harold W. Elledge
Petroleum Engineer

"EXHIBIT B #1"

"EXHIBIT B #1 CINTINUED"

Pipe Tally — Sunco Well #1 — 5 1/2" 15.5# LT&C & ST&C Casing — 2/2/92

Coleman Oil & Gas

Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM
1	42.55	42.55	51	41.76	1926.50	101	1.79	2517.83	151	32.40	2550.23	201	28.96	4143.22	251	32.72	4801.12
2	40.46	83.01	52	41.52	1968.02	102		2517.83	152	32.29	2582.52	202	31.41	4174.63	252	41.78	4842.90
3	42.02	125.03	53	41.75	2009.77	103	B	2517.83	153	27.91	2610.43	203	30.39	4205.02	253	21.00	4863.90
4	35.46	160.49	54	41.72	2051.49	104	a	2517.83	154	30.44	2640.87	204	31.37	4236.39	254		4863.90
5	34.50	194.99	55	41.76	2093.25	105	k	2517.83	155	30.73	2671.60	205	29.44	4265.83	255	l	4863.90
6	39.58	234.57	56	41.72	2134.97	106	e	2517.83	156	31.25	2702.85	206	28.08	4293.91	256	e	4863.90
7	43.50	278.07	57	33.45	2168.42	107	r	2517.83	157	33.18	2736.03	207	32.38	4326.29	257	f	4863.90
8	32.94	311.01	58	28.68	2197.10	108		2517.83	158	31.37	2767.40	208	32.42	4358.71	258	t	4863.90
9	35.59	346.60	59	30.30	2227.40	109	D	2517.83	159	29.84	2797.24	209	39.88	4398.59	259		4863.90
10	30.55	377.15	60	31.63	2259.03	110	V	2517.83	160	28.36	2825.60	210	33.12	4431.71	260		4863.90
11	21.40	398.55	61	33.77	2292.80	111		2517.83	161	32.45	2858.05	211	32.18	4463.89	261	o	4863.90
12	34.96	433.51	62	31.26	2324.06	112	T	2517.83	162	30.56	2888.61	212	30.70	4494.59	262	u	4863.90
13	36.24	469.75	63	31.03	2355.09	113	o	2517.83	163	31.35	2919.96	213	30.55	4525.14	263	t	4863.90
14	35.51	505.26	64	42.88	2397.97	114	o	2517.83	164	31.73	2951.69	214	32.28	4557.42	264		4863.90
15	35.69	540.95	65	29.33	2427.30	115	l	2517.83	165	30.30	2981.99	215	32.22	4589.64	265		4863.90
16	21.45	562.40	66	27.75	2455.05	116		2517.83	166	32.06	3014.05	216	32.33	4621.97	266		4863.90
17	36.15	598.55	67	28.62	2483.67	117		2517.83	167	30.28	3044.33	217	40.85	4662.82	267		4863.90
18	41.58	640.13	68	29.68	2513.35	118		2517.83	168	30.84	3075.17	218	33.03	4695.85	268		4863.90
19	41.78	681.91	69		2513.35	119		2517.83	169	32.65	3107.82	219	39.85	4735.70	269		4863.90
20	21.91	703.82	70		2513.35	120		2517.83	170	30.70	3138.52	220	32.70	4768.40	270		4863.90
21	33.94	737.76	71	2.69	2516.04	121		2517.83	171	29.34	3167.86	221		4768.40	271		4863.90
22	25.13	762.89	72		2516.04	122		2517.83	172	31.20	3199.06	222		4768.40	272		4863.90
23	41.77	804.66	73	s	2516.04	123		2517.83	173	32.76	3231.82	223		4768.40	273		4863.90
24	36.15	840.81	74	h	2516.04	124		2517.83	174	32.69	3264.51	224		4768.40	274		4863.90
25	41.80	882.61	75	o	2516.04	125		2517.83	175	32.55	3297.06	225		4768.40	275		4863.90
26	41.62	924.23	76	e	2516.04	126		2517.83	176	29.66	3326.72	226		4768.40	276		4863.90
27	41.78	966.01	77	&	2516.04	127		2517.83	177	28.36	3355.08	227		4768.40	277		4863.90
28	41.84	1007.85	78	f	2516.04	128		2517.83	178	32.14	3387.22	228		4768.40	278		4863.90
29	41.74	1049.59	79	l	2516.04	129		2517.83	179	31.67	3418.89	229		4768.40	279		4863.90
30	40.92	1090.51	80	o	2516.04	130		2517.83	180	32.30	3451.19	230		4768.40	280		4863.90
31	33.86	1124.37	81	a	2516.04	131		2517.83	181	30.59	3481.78	231		4768.40	281		4863.90
32	41.89	1166.26	82	t	2516.04	132		2517.83	182	31.92	3513.70	232		4768.40	282		4863.90
33	41.72	1207.98	83	c	2516.04	133		2517.83	183	33.01	3546.71	233		4768.40	283		4863.90
34	41.48	1249.46	84	o	2516.04	134		2517.83	184	29.61	3576.32	234		4768.40	284		4863.90
35	41.74	1291.20	85	l	2516.04	135		2517.83	185	29.13	3605.45	235		4768.40	285		4863.90
36	41.84	1333.04	86	l	2516.04	136		2517.83	186	28.61	3634.06	236		4768.40	286		4863.90
37	41.82	1374.86	87	a	2516.04	137		2517.83	187	34.11	3668.17	237		4768.40	287		4863.90
38	41.08	1415.94	88	r	2516.04	138		2517.83	188	41.18	3709.35	238		4768.40	288		4863.90
39	41.84	1457.78	89		2516.04	139		2517.83	189	41.16	3750.51	239		4768.40	289		4863.90
40	41.84	1499.62	90		2516.04	140		2517.83	190	32.97	3783.48	240		4768.40	290		4863.90
41	41.88	1541.50	91		2516.04	141		2517.83	191	28.73	3812.21	241		4768.40	291		4863.90
42	42.58	1584.08	92		2516.04	142		2517.83	192	28.54	3840.75	242		4768.40	292		4863.90
43	41.45	1625.53	93		2516.04	143		2517.83	193	29.39	3870.14	243		4768.40	293		4863.90
44	30.73	1656.26	94		2516.04	144		2517.83	194	28.25	3898.39	244		4768.40	294		4863.90
45	36.15	1692.41	95		2516.04	145		2517.83	195	29.56	3927.95	245		4768.40	295		4863.90
46	32.62	1725.03	96		2516.04	146		2517.83	196	40.28	3968.23	246		4768.40	296		4863.90
47	41.81	1766.84	97		2516.04	147		2517.83	197	41.18	4009.41	247		4768.40	297		4863.90
48	34.45	1801.29	98		2516.04	148		2517.83	198	41.16	4050.57	248		4768.40	298		4863.90
49	41.75	1843.04	99		2516.04	149		2517.83	199	30.64	4081.21	249		4768.40	299		4863.90
50	41.70	1884.74	100		2516.04	150		2517.83	200	33.05	4114.26	250		4768.40	300		4863.90
col	1884.74			631.30			1.79			1596.43			654.14			95.50	
cum	1884.74			2516.04			2517.83			4114.26			4768.40			4863.90	

float & shoe 2.69

68 jts 2513.35

dv tool 1.79

70 jts 2250.57'

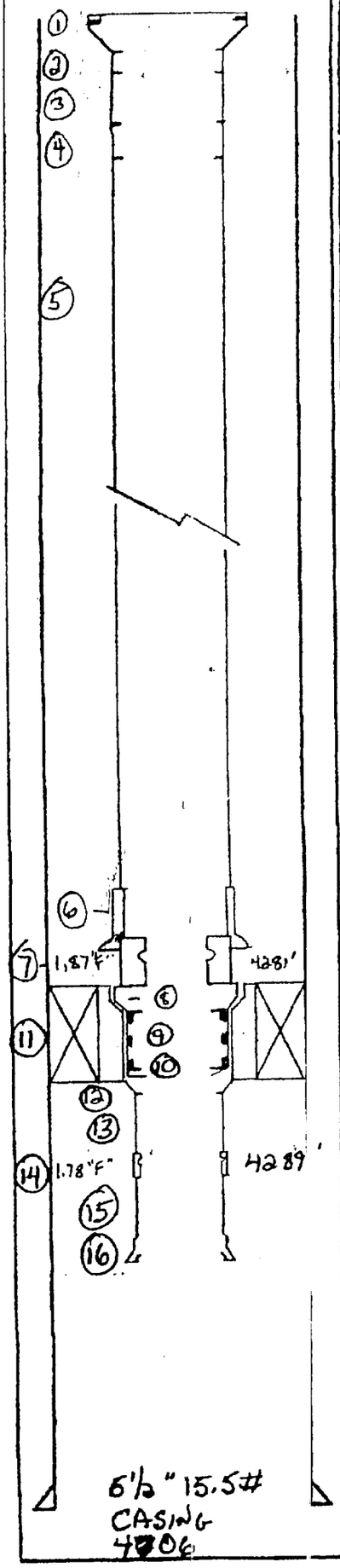
Joints #1 thru #56 are LT&C, the rest are ST&C

DV tool at 2244.17' KB

Anticipated PBTD 4717' KB

CIRC CEMENT

WELL PROFILE



OPERATOR Coleman Oil & Gas Co.
WELL # Sunco WDW #1
FIELD Crouch Mesa
COUNTY San Juan
STATE New Mexico
DATE 7/27/94
☐ NEW COMPLETION ☒ WORKOVER

	Casing	Liner	Tubing
SIZE	5½		2⅞
WEIGHT	15.5		6.5
GRADE			
THREAD			EUE
DEPTH	4706		4265

ITEM NO.	EQUIPMENT AND SERVICES	LENGTH	DEPTH
	KB	13.00	
1	DONUT TYPE TUBING HANGER	.76	
2	2⅞ EU PIN X PIN NIPPLE	.46	
3	2⅞ PLASTIC LINED PUP JOINT	10.15	
4	2⅞ PLASTIC LINED PUP JOINT	6.22	
5	135 JTS 2⅞ PLASTIC LINED TUBING	4248.78	
6	2⅞ x 5½" ARROW 'T-2' PLASTIC COATED	1.66	
	ON-OFF TOOL (MEAS W/ S. NIPPLE)		
7	2⅞ x 1.87 STAINLESS STEEL NIPPLE		4281
	W/ 1.87" 'F' PROFILE		
8	2.688 x 5½" ARROW J-LATCH	.90	
9	3 EA 2.688 BONDED SEAL UNITS 357		
10	2.688 ½ MULESHOE BOTTOM	1.42	
11	5½ x 2.688 ARROW 'XL-W" RETRIEVABLE	4.68	4282
	SEAL BORE PACKER		
12	5½ x 2.688 TUBING ADAPTER BOTTOM	1.14	
13	2⅜ PLASTIC COATED PUP JOINT	5.69	
14	2⅜ x 1.78 STAINLESS STEEL NIPPLE	.87	4289
	W/ 1.78" 'F' PROFILE		
15	2⅜ PLASTIC COATED PUP JOINT	6.10	
16	2⅜ x 5½ W/L ENTRY GUIDE COLLAR	.55	4296

COMMENTS:
SEAL ASSY & TUBING WERE LANDED W/ 4000# TENSION
T-2 ON-OFF TOOL IS LEFT HAND RELEASE
J-LATCH SEAL ASSY IS RIGHT HAND RELEASE

PREPARED BY	OFFICE	PHONE
B. J. WARBURTON	FARMINGTON, NM	(505) 326-5141

"EXIBIT B #2 CONTINUED." Pg 1 of 2

PIPE RECORD

Coleman Oil & Gas LEASE Sunco Disposal WELL NO. 1 7/28 1994

PIPE TALLY - Show every piece of equipment going into the hole in the order run.

COLUMN 1		COLUMN 2		COLUMN 3		COLUMN 4		COLUMN 5		COLUMN 6		COLUMN 7		COLUMN 8	
GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.	
JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET
	55		6 10		87		5 69		1 10		4 68		90		1 66
	2 7/8" x 5 1/2" WL Entry Guide		2 3/8" PLASTIC LINED PUP JOINT		2 3/8" x 1.78" SS "F" NIPPLE		2 3/8" PLASTIC LINED PUP JOINT		5 1/2" x 2.688" TUBING ADAPTOR BOTTOM		5 1/2" x 2.688" ARROW "XL-U" RET. SEAL BORE PACKER		2.688" x 5 1/2" ARROW J-LATCH		2 7/8" x 5 1/2" ARROW T-2 ON-OFF TOOL W/1.87" F NIPPLE
	55		6 10		87		5 69		1 10		4 68		90		1 66

Jts. on rack before running | Jts. left on rack after running | No. Jts. run

COLUMN NO.	ITEM	JTS.	O.D.	WEIGHT	GRADE	THREAD	MAKE	FEET
1	WIRELINE ENTRY GUIDE	—	2 3/8	—	—	—	MTN STATES	55
2	PLASTIC LINED PUP JOINT	1	2 3/8	—	—	—	MTN STATES	6 10
3	1.78" STAINLESS "F" NIPPLE	—	2 3/8	—	—	—	MTN STATES	87
4	PLASTIC LINED PUP JOINT	1	2 3/8	—	—	—	MTN STATES	5 69
5	TUBING ADAPTOR BOTTOM	—	2 11/16	—	—	—	MTN STATES	1 10
6	ARROW XL-U RETRIEVABLE PACKER	—	5 1/2				ARROW	4 68
7	ARROW J-LATCH	—	2 11/16				ARROW	90
8	ARROW T-2 ON/OFF TOOL		2 7/8				ARROW	1 66

*ASTERISK DESIGNATES CENTRALIZER ON JOINT

TOTAL 29 55

REMARKS

TOP PACKER @ 4280.93' KB - BOTTOM @ 4290.92' KB

PUP JOINTS USED TO SPACE WITH MS. A.B.

MODIFIED W/ TEFLON RINGS

JOINTS NOT RUN

TOTAL

TOP ROTARY DRIVE BUSHING TO TOP OF CASING HEAD FLANGE (+)

SET AT

CO. REP.

"EXIBIT B #2 CONTINUE"

PIPE RECORD

Coleman Oil & Gas LEASE Sunco Disposal WELL NO. 1 7/28 19

PIPE TALLY - Show every piece of equipment going into the hole in the order run.

COLUMN 1		COLUMN 2		COLUMN 3		COLUMN 4		COLUMN 5		COLUMN 6		COLUMN 7		COLUMN 8	
GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.		GRADE WT.	
JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET
	29 55		64 30		61 30		62 25	TAKEN OUT			6 22		46		76
	58 05		64 05		63 20		63 65		31 —		10 15				
	65 10		63 30		63 90		61 65		31 12						
	62 45		62 95		62 85		63 85		31 02						
	63 40		61 95		62 90		65 10		31 48						
	62 78		60 80		63 50		65 10		32 58					DONUT TUBING HANGER	
	65 28		64 55		60 30		61 55		31 33						
	63 20		62 60		64 60		62 65		188 53						
	62 63		64 —		62 35		505 80			2 7/8" AB MODIFIED FLAP JOINTS					
	62 75		63 60		63 55										
	62 55		61 70		63 63	New Pipe						2 7/8" PIN X PIN NIPPLE			
	59 62		57 95		64 35		29 97	in							
	61 90		61 25		62 50		32 52	in							
	63 60		65 15		61 15		32 53	in							
	62 05		63 45		63 75		29 98	out							
	65 10		61 15		62 65		31 54	out							
	63 80		63 70		61 90		62 45	in							
	65 25		65 05		63 90		31 50	in							
	65 —		63 30		61 75		188 97	in							
	62 75		61 10		65 —										
	1226 81		1255 70		1259 03						16 37		46		76

Jts. on rack before running | Jts. left on rack after running | No. Jts. run

COLUMN NO.	ITEM	JTS.	O.D.	WEIGHT	GRADE	THREAD	MAKE	FEET
1	Tubing	39	2 7/8	6.5	J-55	8 RD	Salta	1226 81
2	Tubing	40	"	"	"	"	Salta	1255 70
3	Tubing	40	"	"	"	"	Salta	1259 03
4	Tubing	16	"	"	"	"	Salta	505 80
5	Pup Joint	2	"	"	"	"	Salta	16 37
6	Eue Pin x Pin Nipple	1	"				Mt. States	46
7	Donut Hanger	1					A-1	76
8								

REMARKS *ASTERISK DESIGNATES CENTRALIZER ON JOINT

TOTAL Page 1 & Page 2	4286	48
JOINTS NOT RUN Trade out		44
Bad Joints w/ new		
TOTAL	4286	92
TOP ROTARY DRIVE BUSHING TO TOP OF CASING HEAD FLANGE (+)	13	00
Bottom Packer Assm.	4299	92
CO. REP.		

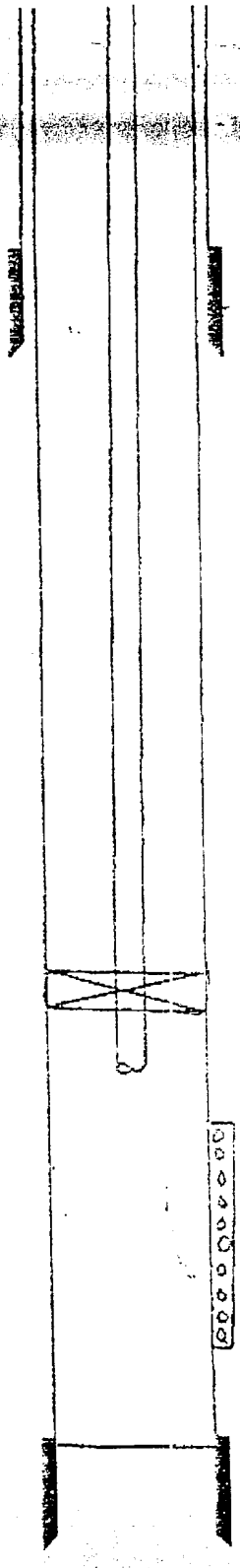
"EXHIBIT C"

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

204 N. Auburn
Farmington, New Mexico 87401
(505) 327-4892

COLEMAN OIL & GAS
SUNCO DISPOSAL WELL #1



8 5/8", 24.0 #, K-55
SET AT 209'

MOUNTAIN STATES ARROW SET 1 PACKER AT 4265'

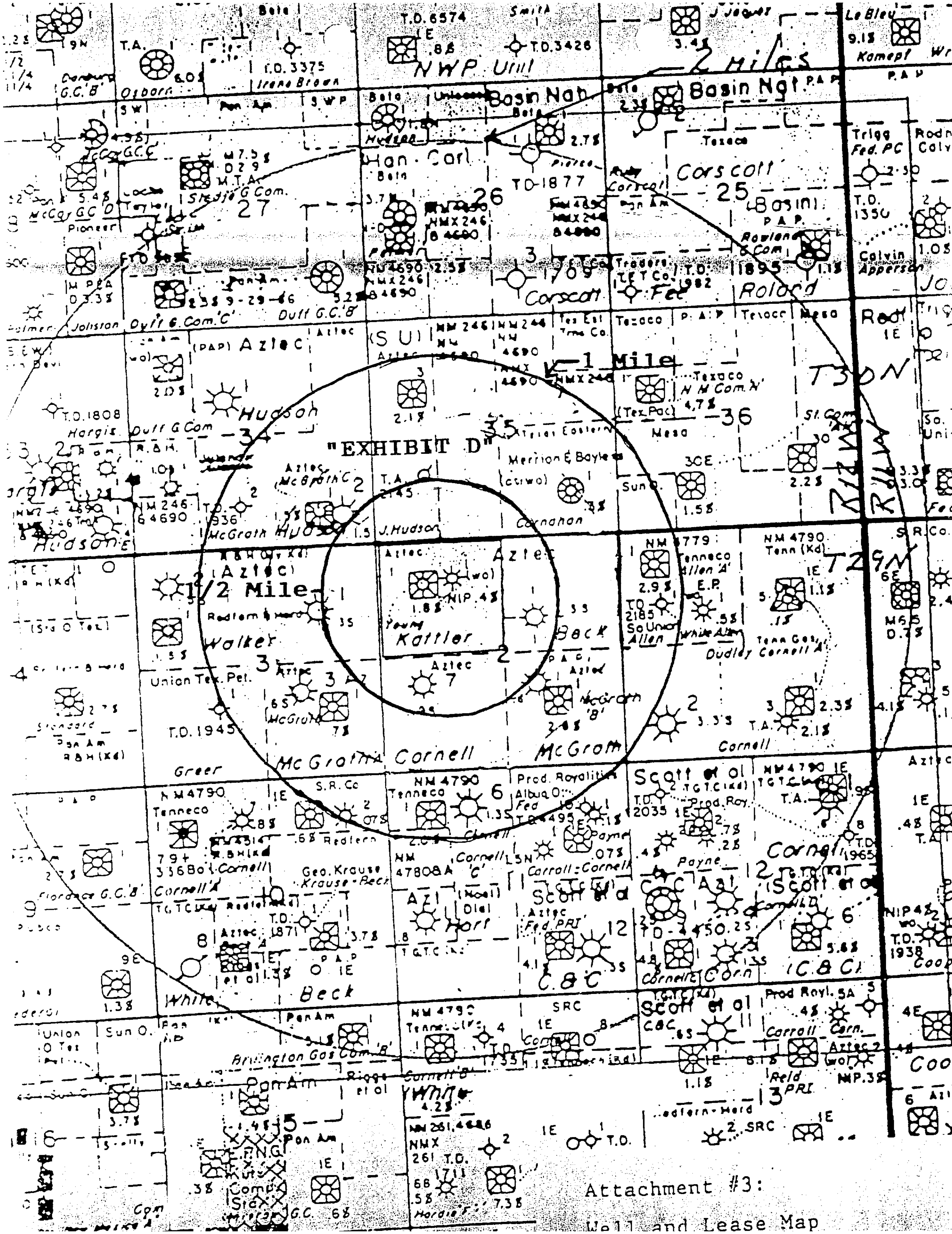
136 JTS 2 7/8, 6.5 #, J55, PLASTIC COATED TBG SET AT 4295'. (ONE JOINT BELOW PACKER)

PERFS 4350 - 4460
2 SPF 220 TOTAL HOLES.

PBTD - 4706'

5 1/2", 15.5 #, K-55
SET AT 4760

Paul Thompson 10/19/93



Attachment #3:

Well and Lease Map

EXHIBIT E

RECORD#	API NUMBER	UL	SEC	TWN	RGE	WELL NAME	WELL #	OPERATOR	POOL	TYPE	DATE	DEP
1	30-045-08851	D	01	29N	12W	Allen A	1	Amoco	Basin Dak	CO	4-25-62	6786
7	30-045-26014	L	01	29N	12W	Allen A	1E	Amoco	Basin Dak	CO	4-12-85	6625
12	30-045-08839	D	02	29N	12W	Young	1	Meridian	Basin Dak	CO	8-13-61	6740
15	30-045-08704	J	02	29N	12W	McGrath B	1	Meridian	Basin Dak	CO	12-3-61	6720
21	30-045-08712	I	03	29N	12W	McGrath A	1	Meridian	Basin Dak	CO	4-29-64	6689
79	35-045-13092	D	11	29N	12W	Cornell C	1	Amoco	Basin Dak	CO	12-6-61	6604
21211	30-045-26141	G	34	30N	12W	Duff Gas Com	1E	Amoco	Basin Dak	CO	1-7-85	6608
21212	30-045-08945	P	34	30N	12W	McGrath C	1	Meridian	Basin Dak	CO	3-6-63	6637
21213	30-045-11770	E	35	30N	12W	Hudson	3	Meridian	Basin Dak	CO	8-15-66	6750
21214	30-045-08946	P	35	30N	12W	Carnahan	1	Merrion	Basin Dak	ZA	12-19-60	6760
21215	30-045-08946	P	35	30N	12W	Carahan Com	1	Merrion	FL Mesa V	ZA	1-61	6760
21216	30-045-25844	P	35	30N	12W	Carahan Com	2	Merrion	Basin Dak	CO	7-23-84	6780

*The completion records are also attached.

EXHIBIT F

Calculated Area of Review by Hydreologic Equation

$$\sqrt{\frac{QT}{L*\theta d*(1-SW) \times \overline{II}}} = r$$

Where:

Q =volume of fluid in ft^3/yr
T =life of project
h =reservoir height
θ_d=reservoir porosity
SW=water saturation
$\overline{II}$=pi
r =radius

Q =5.615 ft^3/bbl * 2000 bbl/day * 365 days/year
Q =4,098,950 ft^3/year
T =20 years
L =100 ft
Q_d=.14
SW=.30
$\overline{II}$=3.14

$$r = \sqrt{\frac{(4,098,950)\ (20)}{(100)(.14)(1-.30)\overline{II}}} = \sqrt{\frac{81,979,000}{30,772}} = 1632'$$

**Calculated Area of Review is 1632'

1-3-94

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

DRUG FREE

"Exhibit G"

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

December 22, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Walsh Engineering & Production Corporation
204 North Auburn
Farmington, NM 87401

Attention: Paul C. Thompson

RE: Injection Pressure Increase, Coleman Sunco Disposal Well No. 1, Section 2, Township 29 North, Range 12 West, San Juan County, New Mexico

Dear Mr Thompson:

Reference is made to your request dated December 8, 1993 to increase the surface injection pressure on the above referenced well. This request is based on a step rate tests conducted on this well on December 7, 1993. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	Maximum Injection Surface Pressure
Coleman Sunco Disposal Well No. 1 1595' FNL - 1005' FWL Unit E, Section 2, Township 29 North, Range 12 West	2850 psig
This well located in San Juan County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay
Director

WJL/BES/amg

cc: Oil Conservation Division - Aztec
File: SWD-457
PSI-X, 4th Quarter

"Exhibit H"

API FORM 45.1

ANALYSIS NO. 91-76

FIELD RECEIPT NO.

API WATER ANALYSIS REPORT FORM

Company: Coleman Oil & Gas		Sample No.: 2	Date Sampled: 02-25-92	
Field	Legal Description: Sec 2 T29N R8W	County or Parish: San Juan	State: NM	
Lease or Unit: Sunco Disposal	Well: #1	Depth: 4	Formation: M.V. (Pt. Lookout)	Water, B/D
Type of Water (Produced, Supply, etc.): Produced	Sampling Point: Pit		Sampled By	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	7451	323.94
Calcium, Ca	168	8.40
Magnesium, Mg	39	3.20
Barium, Ba	—	—
Potassium, K	720	18.41

ANIONS		
Chloride, Cl	11879	335.10
Sulfate, SO_4	185	3.85
Carbonate, CO_3	0	0
Bicarbonate, HCO_3	915	15.00
Hydroxide, OH	0	0

Total Dissolved Solids (calc.): 21357

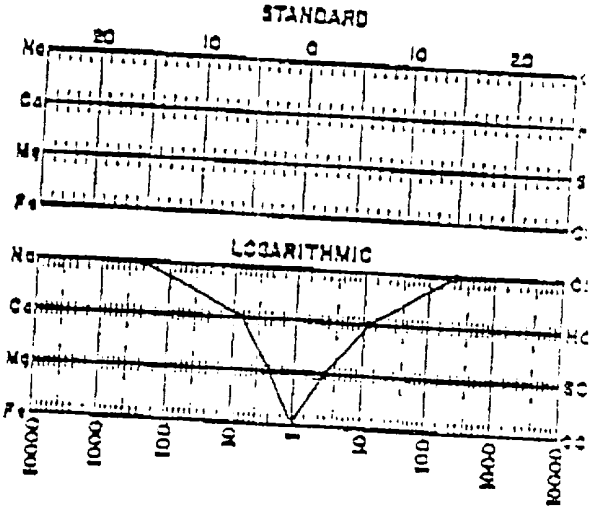
Iron, Fe (total): 25 ppm

Sulfide, as H_2S: neg

OTHER PROPERTIES

pH	7.01
Specific Gravity, 60/60 F.	1.015
Resistivity (ohm-meters) 78 F.	.35
Total Hardness	580

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
BRIAN AULT-District Engineer
(505) 327-6222

HALLIBURTON COMPANY
FARMINGTON, NM "Exhibit I"

LABORATORY WATER

To: Southland Royalty

Attn: Doug Harris

Box 570

Farmington, N.M. 87499

Date 9/12/84

 4255-4377

Submitted by Doug Harris Date Rec.

Well No. McGrath #4 Depth 4255' - 4377' Formation Point Lookout

County Field Source DST #2 4255-4377

	Top Recovery	Bottom Recovery	Sample Chamber
Resistivity	3.16@ 65°F	.97@ 71°F	.68 @ 68°F
Specific Gravity			
pH	8.47	7.53	7.86
Calcium (Ca)	55	210	210 *MP
Magnesium (Mg)	NT	NT	35
Chlorides (Cl)	2900	6950	9900
Sulfates (SO_4)			
Bicarbonates (HCO_3)	320	705	670
Soluble Iron (Fe)	NT	NT	NT

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst:

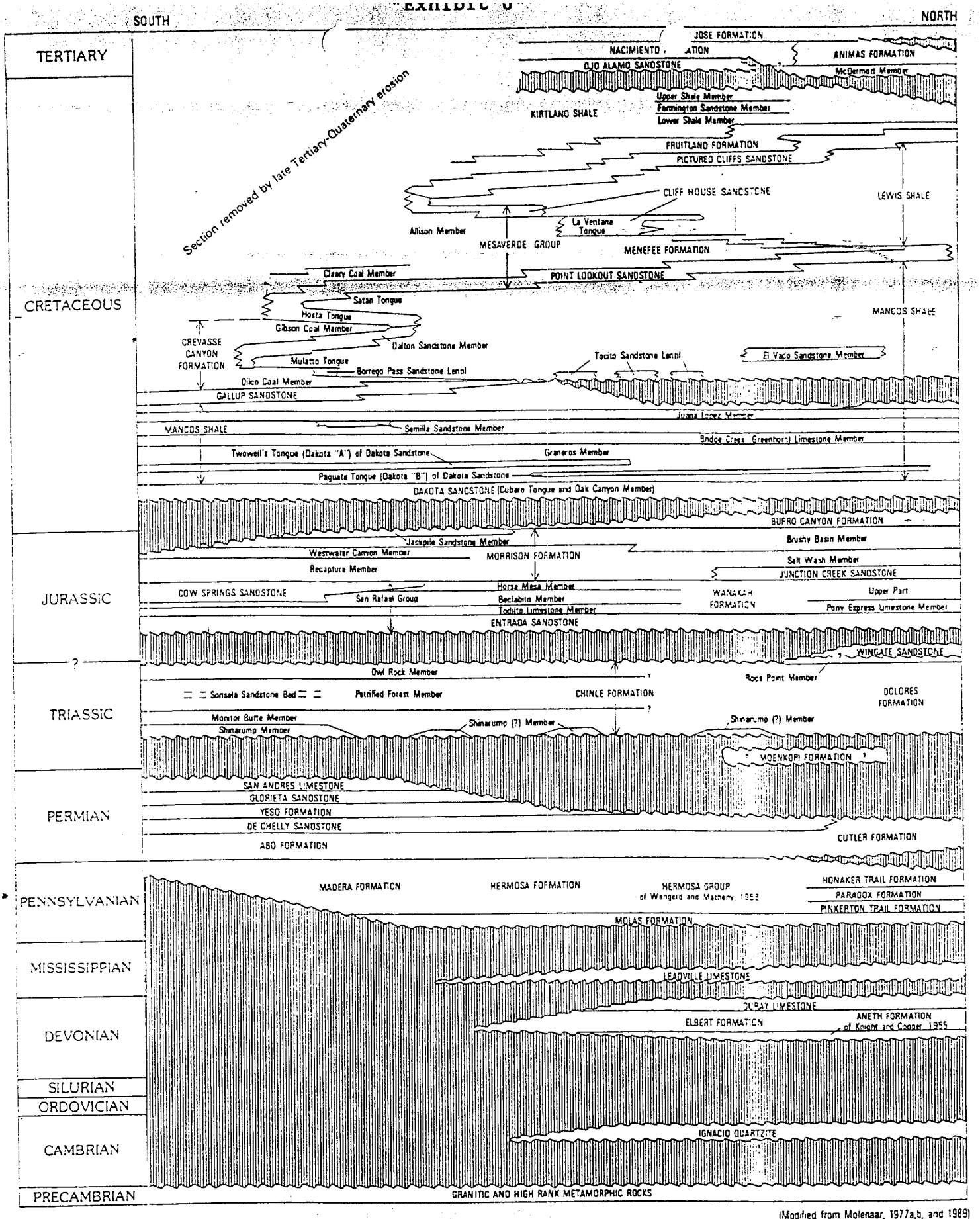
cc:

HALLIBURTON COMPANY

By

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.



(Modified from Molenaar, 1977a,b, and 1989)

Figure 3. Time- and rock-stratigraphic framework and nomenclature.

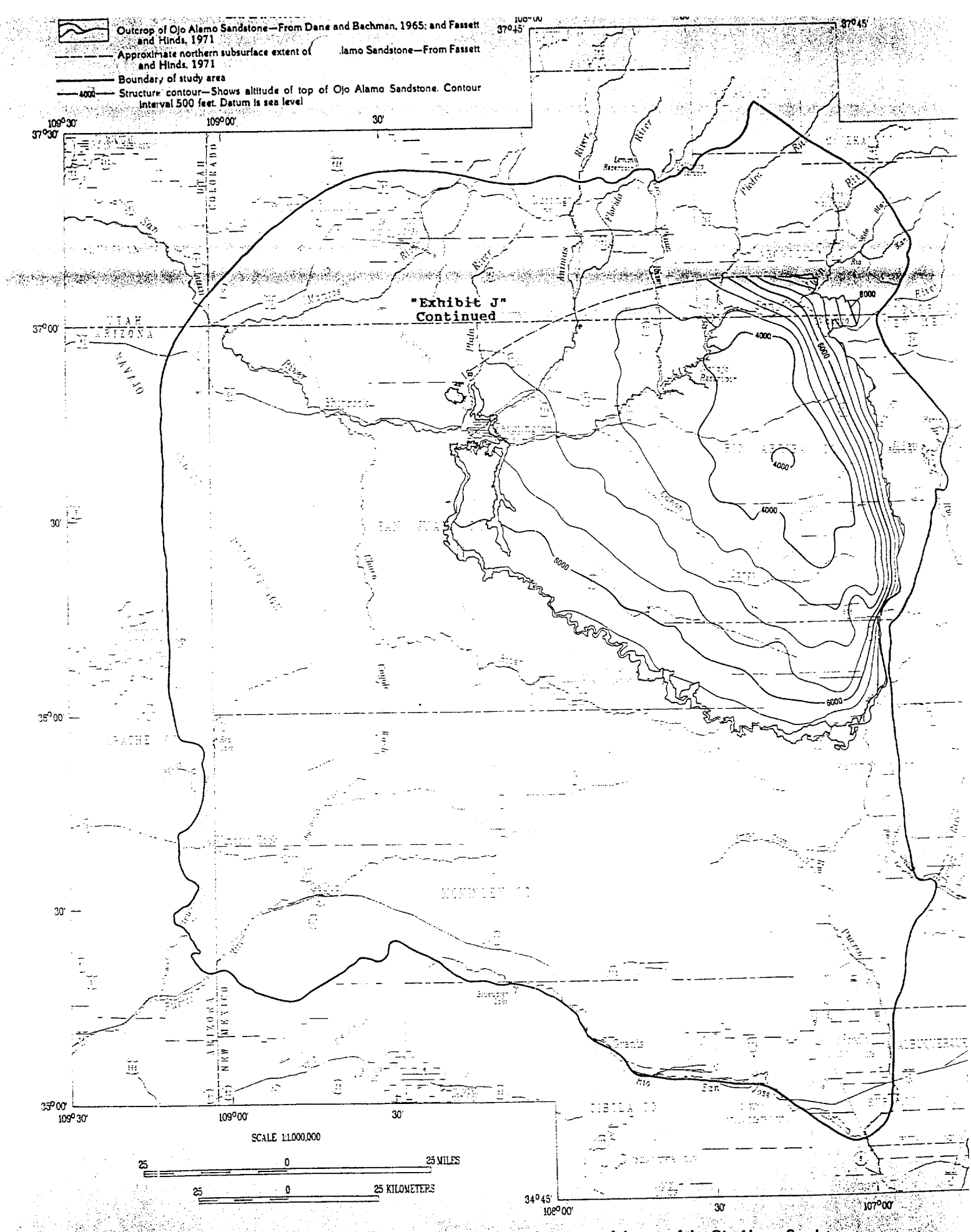


Figure 6. Approximate altitude and configuration of the top of the Ojo Alamo Sandstone.

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

EXPLANATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

"Exhibit K"

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-235) - Coleman Oil and Gas, Inc., Mr. Chuck Badsgard, P.O. Box 443, Farmington, New Mexico, 87499 has submitted a discharge plan application to reclassify their permitted Class II disposal well located in Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico to a Class I non-hazardous disposal well. Currently 2,000 barrels per day of oil field liquid waste classified as exempt from Resource Conservation and Recovery Act Subtitle III regulations are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,480 feet. The discharge plan application proposes to reclassify the category of the well to allow for the injection of an additional 800 barrels per day of oil field liquid waste that has been demonstrated to be "non-hazardous" by testing. A combined total of approximately 2,800 barrels per day will be disposed of by injection into the Point Lookout Formation. The total dissolved solids concentration of the injection water is approximately 24,000 mg/l. The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l. The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface. Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dissolved solids concentration of approximately 450 mg/l.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 5th day of February 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

SEAL

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-128
Revised 5/1/57

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
~~Tennessee Gas Transmission Company~~ Tennessee Gas Transmission Company	Allen Dakota Gas Unit "A"	1

Unit Letter	Section	Township	Range	County
	1	29 North	12 West	San Juan County

Actual Footage Location of Well: 790 feet from the North line and 790 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5905.5	Dakota	Basin	~~360~~ 322.03 Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO _____. *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

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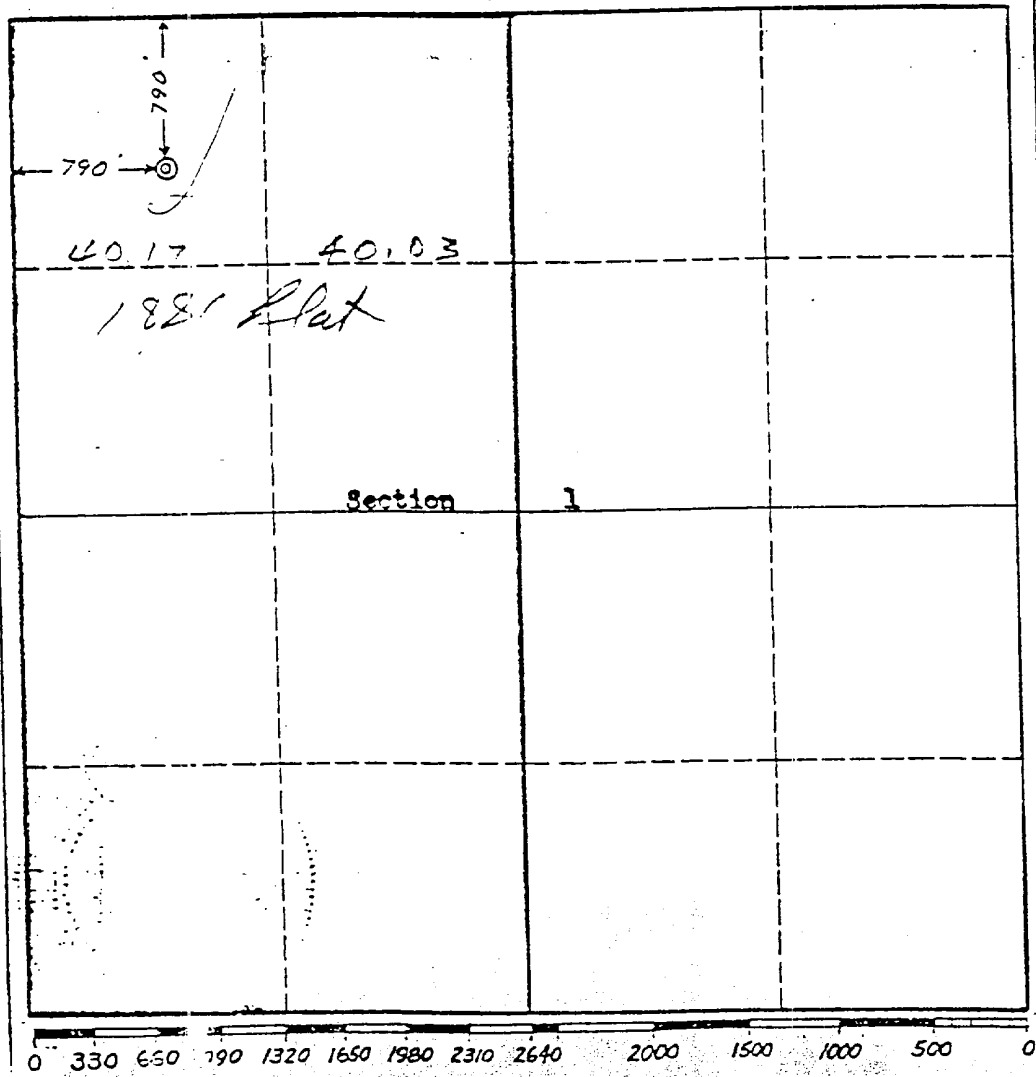
MAR 13 1961
OIL CONSERVATION COM.
CERTIFICATION DIST. 3

SECTION B



I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

Name: J.J. Lacey

Position: District Petroleum Engineer

Company: Tennessee Gas Transmission

Date: March 10, 1961

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

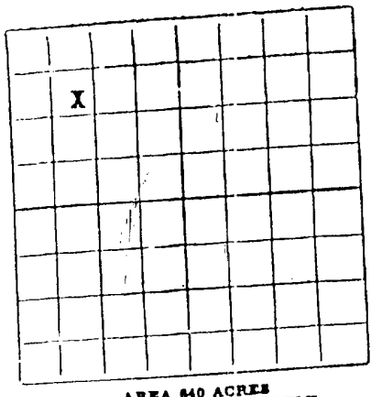
Date Surveyed: 9 March 1961

Registered Professional Engineer and/or Land Surveyor: Robert H. Ernst

Certificate No.: PE & LS 2463

San Juan Engineering Co.

(Form C-105)



AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE. If State Land submit 6 Copies

Tenneco Corporation (Company or Operator) Allen Dakota Gas Unit "A" (Lease)

Well No. 1, in NW ¼ of NW ¼, of Sec. 1, T. 29N, R. 12W, NMPM.

Basin Dakota Pool, San Juan County.

Well is 790 feet from N line and 790 feet from W line of Section 1. If State Land the Oil and Gas Lease No. is NM 520 NM 524

Drilling Commenced March 12, 19 61. Drilling was Completed May 19, 19 61.

Name of Drilling Contractor Great Western Drilling Company

Address Farmington, New Mexico

Elevation above sea level at Top of Tubing Head 5905 GL The information given is to be kept confidential until , 19

OIL SANDS OR ZONES

No. 1, from 6714 to 6718 No. 4, from 6605 to 6620

No. 2, from 6700 to 6706 No. 5, from 6518 to 6524

No. 3, from 6689 to 6693 No. 6, from 6527 to 6533

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JUL 3 1961
O. C. C.

IMPORTANT WATER SANDS

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

No. 1, from None to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8" OD	24#	New	264'	Guide	--	--	Surface
4 1/2"	9.5#	New	4628'	Float	--	6518-6718	Production
4 1/2"	11.6#	New	2157'				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12 1/4"	8 5/8"	264'	200 Sx	Two Plug		
7 7/8"	4 1/2"	6785'	300 Sx	Two Plug		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Sand Frac Perfs 6714-18; 6700-06; 6689; 93, with 10,000# 20-40 sand and 20,000 gal water.

Sand Frac Perfs 6605-20 with 250 gal BDA, 43,000# 20-40 sand and 68,000 gal water.

Sand Frac Perfs 6518-24 and 6527-33 with 250 gal BDA 40,000# 20-40 sand and 52,000 gal water.

Result of Production Stimulation

TEST-- Flw 2882 MCFPD, AOF 3162, 10 BBl cond per MMCF on 3/4" choke TP 230, CP 710, SITP 2096, BHP 2566.

Depth Cleaned Out

NEW MEXICO
MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
TENNECO OIL COMPANY	ALLEN "A"	1E

Unit Letter	Section	Township	Range	County
L	1	29N	12W	San Juan

Actual Footage Location of Well:
1450 feet from the South line and 790 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5831	Dakota	Basin Dakota	~~320~~ Acres

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

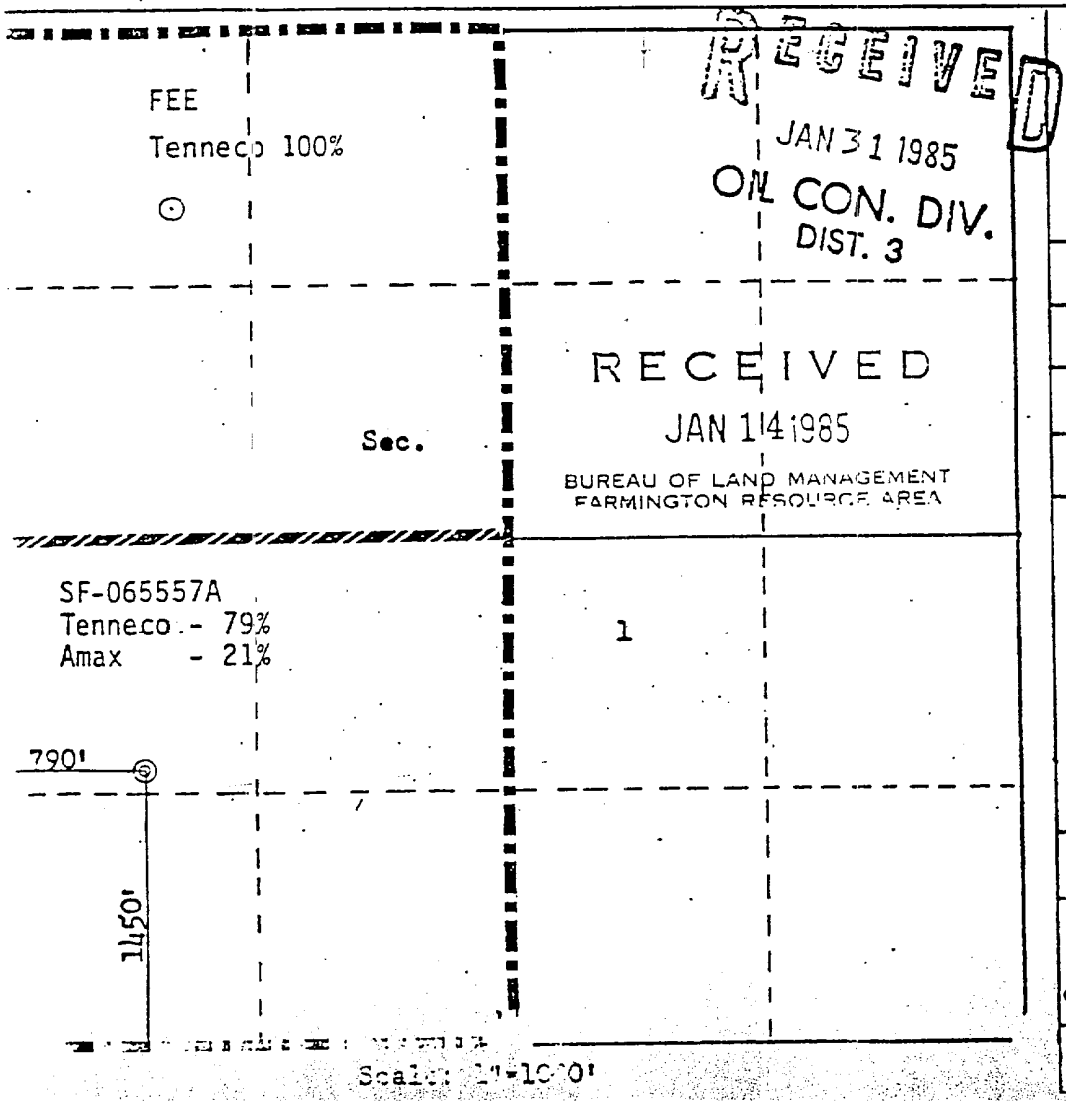
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

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

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

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



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JAN 31 1985
OIL CON. DIV.
DIST. 3

RECEIVED
JAN 14 1985
BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

CERTIFICATION

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

Scott McKinney

Name: Scott McKinney

Position: Sr. Regulatory Analyst

Company: Tenneco Oil Co

Date: January 10, 1985

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

Date Surveyed: October 27, 1984

Registered Professional Engineer and Land Surveyor:

Fred B. Kerr Jr.

Certificate No.: 3950

983)
9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: SF-065557A
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Allen A
9. WELL NO.: 1E
10. FIELD AND POOL, OR WILDCAT: Basin Dakota
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEc.1, T29N, R12W
12. COUNTY OR PARISH: San Juan
13. STATE: NM

1. OIL WELL ☐ GAS WELL ☒ OTHER
2. NAME OF OPERATOR: Tenneco Oil Company
3. ADDRESS OF OPERATOR: P.O. Box 3249, Englewood, CO 80155
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1450' FSL, 790' FWL
14. PERMIT NO.: 30-045-26214
15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF ☐	PULL OR ALTER CASING ☐	WATER SHUT-OFF ☐	REPAIRING WELL ☐
FRACTURE TREAT ☐	MULTIPLE COMPLETE ☐	FRACTURE TREATMENT ☐	ALTERING CASING ☐
SHOOT OR ACIDIZE ☐	ABANDON* ☐	SHOOTING OR ACIDIZING ☐	ABANDONMENT* ☐
REPAIR WELL ☐	CHANGE PLANS ☐	(Other) Progress report ☐	
(Other)		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3/22/85 MIRU w/Four Corners rig #7. Spud 12 1/4" surface 10:15 am 3/22/85. Drlg. TOOH RU & run 7 jts, 8 5/8 32# K-55 STC csg. Total 303 w/tools, set @318' KB. RU Western & cmt w/15 bbl H2), 274 sx (325CF), "B" w/1/4 #/sx cello-flake + 2% CaCl, plug dn 3:30 pm 3/22/85. Circ 15 bbl excess cmt. WOC NUBOP test blind rams & manifold to 1000 psi ok. TIH tag cmt @287, drill plug & cmt to 5' end of shoe, test csg & pipe rams to 1000 psi ok. Drill ahead.

3/31/85 RU run 163 jts, 5 1/2" 17# N-80 LT&C, total w/tools 6642.50. RU & circ cmt 1st stage w/20 bbls mud flush, 120 sx 221 CF 65-35 POZ 6% gel, + 1/4 #/sx cello-flake, tailed w/100 sx 118 CF "B" w/ 1/4 #/sx cello-flake. Plug on 4:15 am 4/1/85. Drop bomb Open tool & circ.

4/01/85 Cmt 2nd stage w/20 bbl mud flush 500 sx 65/35 6% gel 1/4# cello seal tailed w/100 sx "B" 1/4# cello seal. Drop bomb open tool & circ. Cmt 3rd stage w/20 bbl mud flush 200 sx 65/35 6% gel 1/4# cello seal. Plug dn 1:30 pm 4/1/85. Circ 2 bbl excess cemt. Rig release @3:30 pm 4/1/85

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APR 15 1985
OIL CON. DIV.
DIST. 3

18. I hereby certify that the foregoing is true and correct
SIGNED Scott McKinney TITLE Sr. Regulatory Analyst DATE April 4, 1985

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECOF
APR 12 1985
FARMINGTON RESOURCE AR
BY

*See Instructions on Reverse Side

NMOCC

Title 18 U.S.C. Section 1001, makes 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.

	GAS		
OPERATOR			
PRORATION OFFICE			

Operator
Tenneco Oil Company

Address
P. O. Box 3249, Englewood, CO 80155

Reason(s) for filing (Check proper box)
New Well [X]
Recompletion [ ]
Change in Ownership [ ]

Change in Transporter of:
Oil [ ] Dry Gas [ ]
Casinghead Gas [ ] Condensate [ ]

Other (Please explain)

If change of ownership give name and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease State, Federal or Fee	Lease No.
Allen A	1E	Basin Dakota	USA SF	065557A

Location
Unit Letter L : 1450 Feet From The South Line and 790 Feet From The West

Line of Section 1 Township 29N Range 12W , NMPM, San Juan County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]
Gary Energy Corp.
Address (Give address to which approved copy of this form is to be sent)
4 Inverness Ct. East, Englewood, CO 80112

Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]
El Paso Natural Gas Company
Address (Give address to which approved copy of this form is to be sent)
P. O. Box 4990, Farmington, NM 87499

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	L	1	29N	12W	NO	ASAP

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
3-22-85	4-21-85	6625' KB	6619' KB
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
5831' GL	Dakota	6425' KB	6559' KB
Perforations 2 JSPF 43', 86 holes 6425-36', 6502-28', 6596-6602' KB			**Depth Casing Shoe** 6622' KB

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12 1/4"	8 5/8" csg	318' KB	275 sx 325 CF
7 7/8"	5 1/2" csg	6622' KB	720 sx ~~1745~~ CF 1627
	2 3/8	6559	

TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	**Tubing Pressure**	**Casing Pressure** / **Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.** / **Gas-MCF**

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MAY 02 1985
OIL CON. DIV.
DIST. 3

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
1936	3 hrs		
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
back pressure	1325	1325	3/4"

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED 6-12-85 JUN 12 1985, 19

BY Original Signed by FRANK T. CHAVEZ

FORM C-128
REVISED 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

TION A.

Operator Aztec Oil and Gas Company Lease Young Date July 27, 1961

Well No. 1-D Unit Letter D Section 2 Township 29N Range 12W NMPM

Located 990 Feet From North Line, 990 Feet From West Line

County San Juan G. L. Elevation 5847 Dedicated Acreage ~~320~~ 319.94 Acres

Name of Producing Formation Dakota Pool Basin

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes X No

2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No If answer is "Yes," Type of Consolidation

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER	LAND DESCRIPTION

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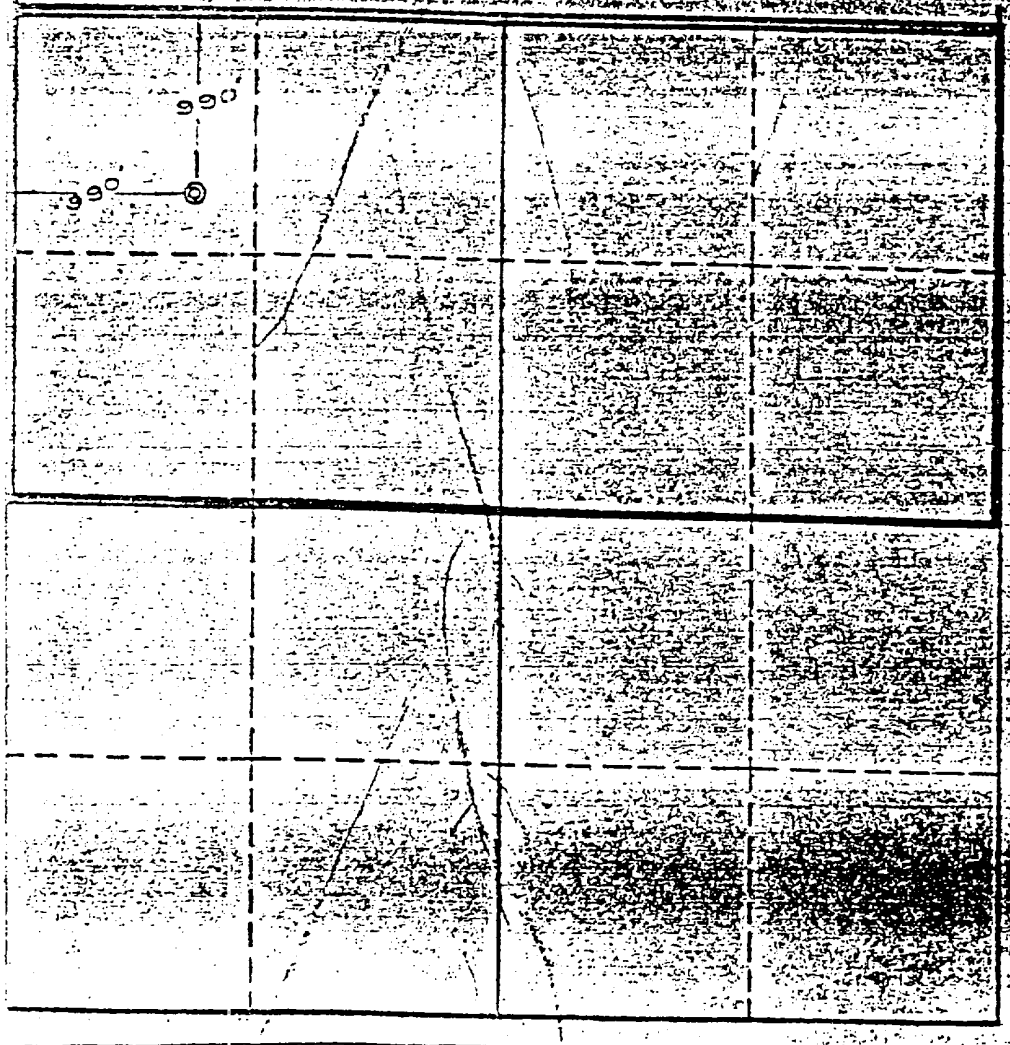
JUL 31 1961
OIL CON. COM.
DIST. 3

SECTION B.



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Aztec Oil and Gas Company
(OPERATOR)

ORIGINAL SIGNED BY JOE C. SALMON
(REPRESENTATIVE)

Joe C. Salmon, Dist. Supt.
Drawer 570, Farmington, N.M.
(ADDRESS)

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

Date Surveyed July 22, 1961

Four States Engineering Co.
Farmington, New Mexico

REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No. 3084

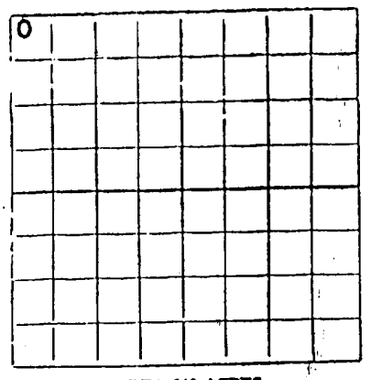
OILS RECEIVED		5
DISTRIBUTION		
	1	
	2	
OFFICE		
TRANSPORTER OIL		
TRANSPORTER GAS		
PRORATION OFFICE		
OPERATOR	1	

Revised 7/1/58
(Form C-105)

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD



AREA 640 ACRES
LOCATE WELL CORRECTLY

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copie.

Aztec Oil & Gas Company (Company or Operator) Young (Lease)

Well No. 1-D, in NW¼ of ¼, of Sec. 2, T. 29N, R. 12W, NMPM.

Basin Dakota Pool, San Juan County.

Well is 990 feet from North line and 990 feet from West line of Section 2. If State Land the Oil and Gas Lease No. is

Drilling Commenced 8/1/61, 19.... Drilling was Completed 8/13/61, 19....

Name of Drilling Contractor Summit Drilling Company

Address Box # 190, Farmington, New Mexico

Elevation above sea level at Top of Tubing Head G.L. - 5847 The information given is to be kept confidential until non-confidential, 19....

OIL SANDS OR ZONES

No. 1, from 6446 to 6456 No. 4, from ... to ...

No. 2, from 6521 to 6546 No. 5, from ... to ...

No. 3, from 6509 to 6644 No. 6, from ... to ...

IMPORTANT WATER SANDS

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

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

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

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

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

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8	24	new	294				
4 1/2	11.6	new	1162				
4 1/2	9.5	new	5566				
2 3/8	4.7	new	6426				

SEP 7 1961
OIL CON. COM.
DIST. 3

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12 ¼	8 5/8	307	275	displacement		
7 7/8	4 1/2	6739	700	two plug		
	2 3/8	6436				

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, Interval treated or shot.)

Sand-water fraced with 60,000# 20/40 sand, 30,000# 10/20 sand, 2036 Bbls. water flushed with 160 Bbls. water.

Result of Production Stimulation Maximum - 3400, Avg. 2800, I.R. - 33.3 bpm, dropped 108 rubber ball sealers, 5 min. shut-in pr. - 1200

Depth Cleaned Out 6705

FORM C-128
REVISED 5/1/67

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Aztec Oil and Gas Company — Lease McGrath — Date November 16, 1961

B-1 — Unit Letter J — Section 2 — Township 29N — Range 12W — NMPM

J 1650 Feet From South Line, 1650 Feet From East Line

ty San Juan — G. L. Elevation 5892 — Dedicated Acreage 320 8/2 Acres

ne of Producing Formation Dakota — Pool Basin

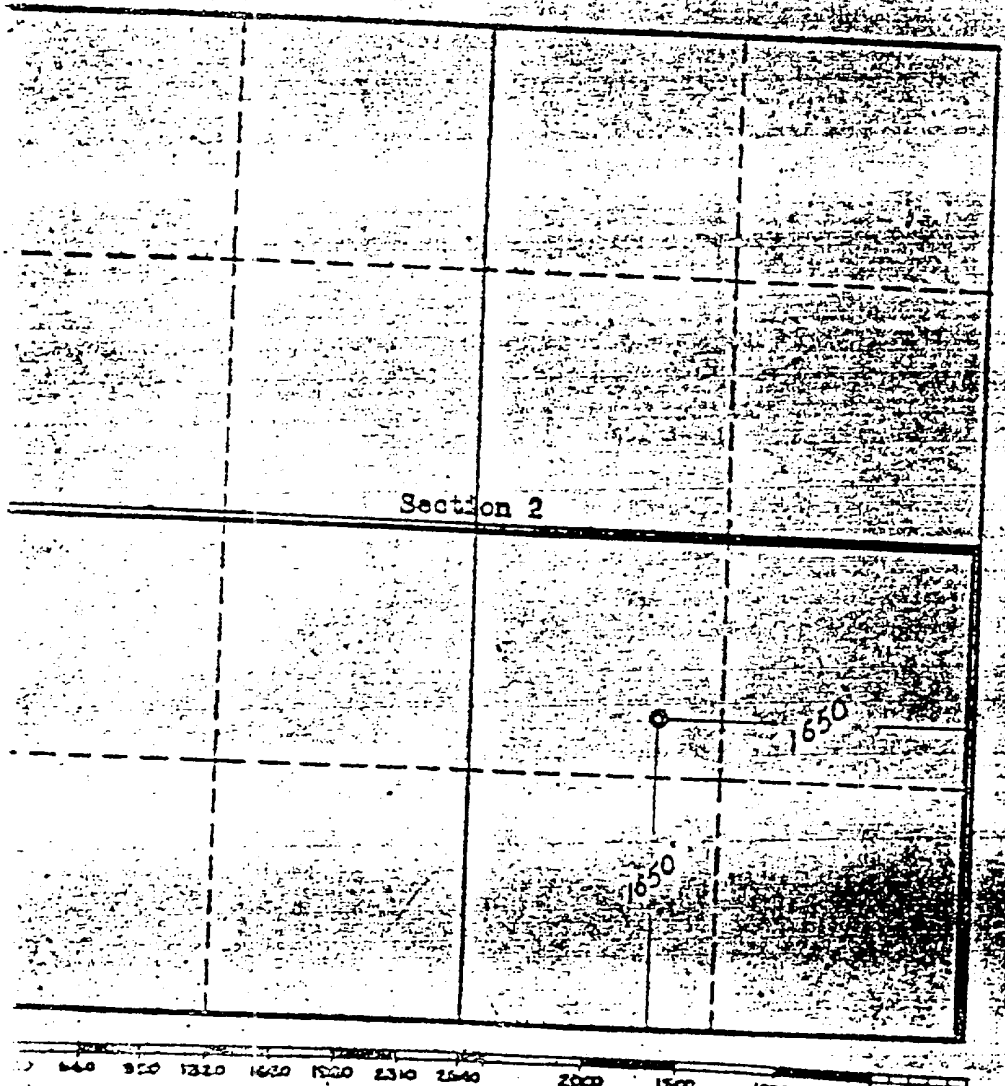
1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes _____ No X

2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____ If answer is "Yes," Type of Consolidation Communitization

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER	LAND DESCRIPTION

SECTION B.



RECEIVED
NOV 20 1961
OIL CON. COM.
DIST. 3

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Aztec Oil and Gas Company
(OPERATOR)

ORIGINAL SIGNED BY JOE C. SALMON
(REPRESENTATIVE)

Joe C. Salmon, Dist. Supt.

P. O. Drawer 570, Farmington
(ADDRESS)

This is to certify that the location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Nov. 15, 1961

Four States Engineering Co.
FARMINGTON, NEW MEXICO

REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No. 3084

(Revised 7/1/58)
(Form C-105)

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copie.

AREA 640 ACRES
LOCATE WELL CORRECTLY

Aztec Oil and Gas Company (Company or Operator) Hildreth Unit (Lease)

Well No. P-1, in SE ¼ of ¼, of Sec. 2, T. 29N, R. 12W, NMPM.

Basin Dakota Pool, San Juan County.

Well is 1590 feet from South line and 1650 feet from East line of Section 2. If State Land the Oil and Gas Lease No. is (Patented)

Drilling Commenced 11/19/61, 19..... Drilling was Completed 12/3/61, 19.....

Name of Drilling Contractor Brannon & Murray Drilling Co.

Address P.O. Box # 672, Coleman, Texas

Elevation above sea level at Top of Tubing Head G.L. 5892 The information given is to be kept confidential until non confidential, 19.....

OIL SANDS OR ZONES

No. 1, from 6486 to 6494 No. 4, from ..... to .....

No. 2, from 6558 to 6596 No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

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

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

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

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

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

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8	24	new	10 jts.				
4 1/2	11.6	new	1110'				
4 1/2	9.5	new	5758'				
2 3/8	4.7	new	6434'				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12	8 5/8	318	225	displacement		
7 7/8	4½	5780	1065	two plug		
	2 3/8	6445	--			

DEC 29 1961
OIL CON. COM.
DIST. 3

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Sand-water frcwed with 87,000 gals. water, 45,000# 20/40 sand, 20,000# 10/20 sand

Breakdown pr. - 3000, Avg. treating pr. - 3000, Max. treating pr. - 3100

Result of Production Stimulation

Avg. I.P. - 3/4 bpm,

Depth Cleaned Out 6626

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TRANSPORTER	OIL	
	GAS	
PRORATION OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

Revised 7/1/57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

WITHIN ½ mile

New Well
Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, New Mexico (Place) 4-29-64 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Aztec Oil & Gas Company (Company or Operator) McGRATH "A" (Lease), Well No. 1, in NE ¼ SE ¼,

I (Unit Letter), Sec. 3, T. 29N, R. 12W, NMPM., Basin Dakota Pool

San Juan County. Date Spudded 3-14-64 Date Drilling Completed 3-29-64

Elevation 5865 Ground Total Depth 6689' PBTD 6552'

Top Oil/Gas Pay 6432 Name of Prod. Form. Dakota

PRODUCING INTERVAL -

Perforations 6432-6440; 6452-6456; 6504-6524

Open Hole ____ Depth Casing Shoe ____ Depth Tubing ____

OIL WELL TEST -

Natural Prod. Test: ____ bbls.oil, ____ bbls water in ____ hrs, ____ min. Size ____ Choke

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used): ____ bbls.oil, ____ bbls water in ____ hrs, ____ min. Size ____ Choke

GAS WELL TEST -

Natural Prod. Test: 1793 MCF/Day; Hours flowed ____ Choke Size 3/4"

Method of Testing (pitot, back pressure, etc.): ____

Test After Acid or Fracture Treatment: ____ MCF/Day; Hours flowed ____

Choke Size ____ Method of Testing: ____

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): Fract w/62,070 gals.treated wtr; 60,000# 20-40 sd;10,000# 10-20 sd

Casing Press. ____ Tubing Press. ____ Date first new oil run to tanks ____

Oil Transporter ____

Gas Transporter ____

Please indicate location:

D	C	B	A
E	F	G	H
L	K	J	I X
M	N	O	P

(FOOTAGE)

Tubing, Casing and Cementing Record

Size	Feet	Sax
8-5/8"	307'	250
4-1/2"	6688'	500
2-3/8"	6429	

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MAY 4 1964
OIL CON. COM.
DIST. 3

Remarks: ____

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved April 29 MAY 4 1964, 1964

OIL CONSERVATION COMMISSION
Original Signed By
By: A. R. KENDRICK
Title: PETROLEUM ENGINEER DIST. NO. 3

Aztec Oil & Gas Company (Company or Operator)

By: ORIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon (Signature)

Title: District Superintendent

Send Communications regarding well to:

Name: Aztec Oil & Gas Company

Address: Drawer 570, Farmington, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
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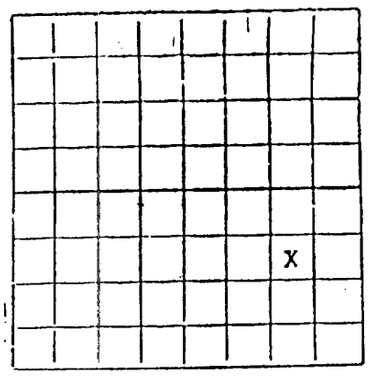
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
PRORATION OFFICE		
OPERATOR		



AREA 640 ACRES
LOCATE WELL CORRECTLY.

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies

Aztec Oil & Gas Company (Company or Operator) McGRATH "A" (Lease)

Well No. 1, in NE ¼ of SE ¼, of Sec. 3, T. 29N, R. 12W, NMPM.

Basin Dakota Pool, San Juan County.

Well is 1720 feet from South line and 990 feet from East line of Section 3. If State Land the Oil and Gas Lease No. is Patented

Drilling Commenced 3-14, 19 64. Drilling was Completed 3-29, 19 64.

Name of Drilling Contractor Arapahoe

Address

Elevation above sea level at Top of Tubing Head The information given is to be kept confidential until , 19

OIL SANDS OR ZONES

No. 1, from 6432 to 6440 No. 4, from to

No. 2, from 6452 to 6456 No. 5, from to

No. 3, from 6504 to 6524 No. 6, from to

IMPORTANT WATER SANDS

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

No. 1, from to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8"	24#	New	9 jts.				
4 1/2"	9.5 & 11.6	New	213 jts.				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
7 7/8	4 1/2"	6688	500 sacks			

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APR 15 1964
OIL CON. COM.
DIST. 3

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Frac'd well with 62,070 gals treated wtr; 60,000 # 20-40 sd; 10,000# 10-20 sand

Result of Production Stimulation No BD pressure; Max. press. 3400#; Minimum pressure 2800#; Average treating pressure 3100#; AIR 41.5 BPM; ISIP 1200#; SI 5 min. 800#

Flushed w/ 1500 gals wtr treated w/1% cacl2 & 20#/1000 gals WAC8 Depth Cleaned Out 6552

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator: TENNECO OIL COMPANY	Lease: CORNELL "C" DAKOTA GAS UNIT "C"		Well No.: 1
Unit Letter: D	Section: 11	Township: 29 North	Range: 12 West
County: San Juan			

Actual Footage Location of Well: 990 feet from the North line and 990 feet from the West line

Ground Level Elev.: 5716' ungraded	Producing Formation: Dakota	Pool: Basin Dakota	Dedicated Acreage: 320 Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO ____. *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ____ NO ____. If answer is "yes," Type of Consolidation ____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

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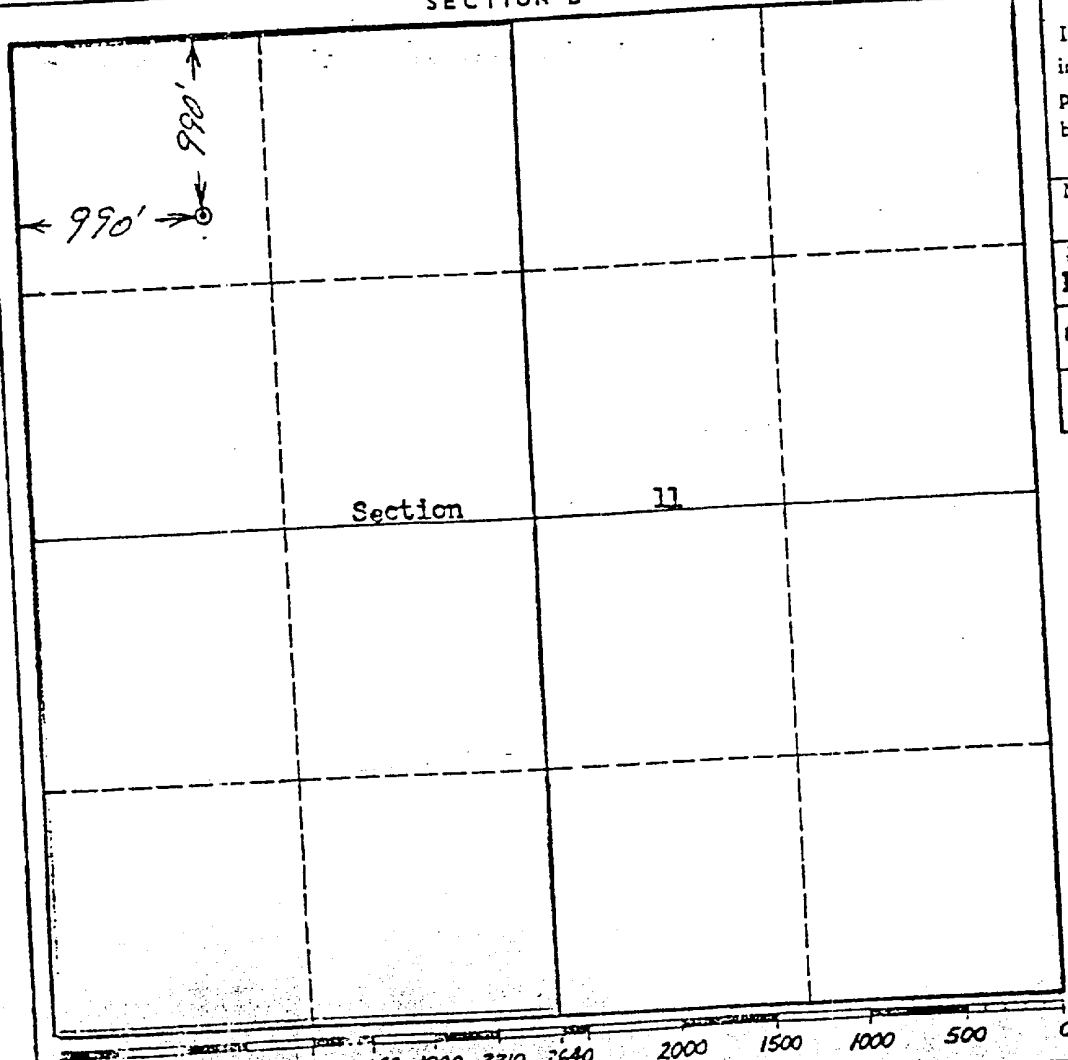
DEC 7 1961
OIL CON. COM.
DIST. 3

SECTION B



CERTIFICATION

I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

Name: J. J. Lacey

Position: Dist. Petroleum Engineer

Company: Tenneco Corp., acting and thru its managing agent, Tenneco Oil Company

Date: December 6, 1961

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

Date Surveyed: 5 December 1961

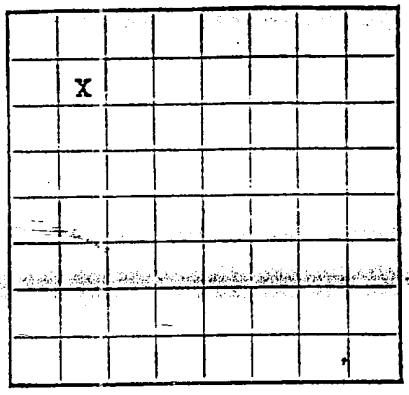
Registered Professional Engineer and/or Land Surveyor: Robert H. Ernst

Certificate No.: NE & LS 2463

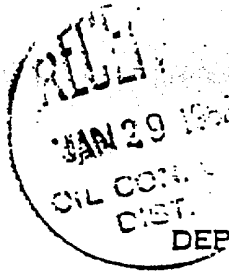
Form 9-330

orm approved.
Budget Bureau No. 42-R355.4.

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 065557-A
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Tenneco Corp., acting by & thru its managing agent, Tenneco Oil Company Address P. O. Box 1714, Durango, Colorado

Lessor or Tract Cornell Dakota Gas Unit "C" Field Basin Dakota State New Mexico

Well No. 1 Sec. 11 T. 29N R. 12W Meridian N.M.P.M. County San Juan

Location 990 ft. [N./S.] of N Line and 990 ft. [E./W.] of W Line of Section 11 Elevation 5716 GL (Datum from sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed L. B. Plumb

Date January 23, 1962 Title Dist. Production Supt.

The summary on this page is for the condition of the well at above date.

Commenced drilling December 6, 19 61 Finished drilling December 27, 19 61

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6298 to 6306 G No. 4, from 6477 to 6483 G

No. 2, from 6380 to 6404 G No. 5, from to

No. 3, from 6462 to 6466 G No. 6, from to

IMPORTANT WATER SANDS

No. 1, from None to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8-5/8	24#	8rd	CF&I	245'	Reg. Pattern				Surface
4-1/2	11.6#	8rd	CF&I	123'	Guide				Production
4-1/2	9.5#	8rd	CF&I	6479'			6298	6483	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	250'	150	Two Plug		
4-1/2	6604	300	Two Plug		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

FOLD | MARK

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Date

AZTEC OIL & GAS COMPANY Lease Mc GRATH

No. C-1 Unit Letter P Section 34 Township 30N Range 12W NMPM

Ated 870 Feet From South Line, 1190 Feet From East Line

unty San Juan G. L. Elevation 5774 Dedicated Acreage 320 Acres

ame of Producing Formation Dakota Pool Basin Dakota

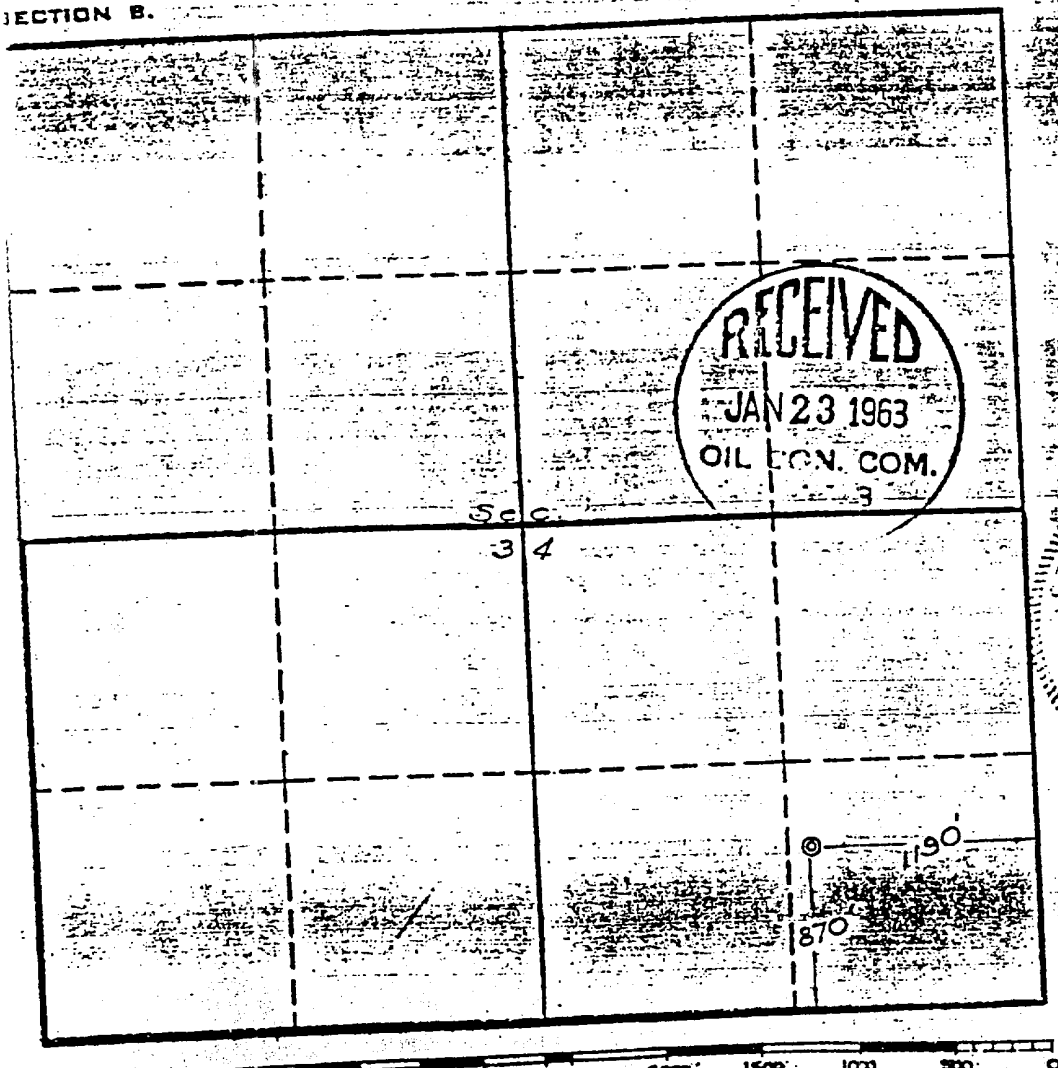
Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes No X

If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No If answer is "Yes," Type of Consolidation communitization

If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER	LAND DESCRIPTION

ECTION B.



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

AZTEC OIL & GAS COMPANY
(OPERATOR)

Joe C. Salmon
(REPRESENTATIVE)

Joe C. Salmon, Dist. Supt.
Drawer # 570, Farmington, N.M.
(ADDRESS)

STATE OF NEW MEXICO

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

Date Surveyed Jan. 18, 1962

FARMINGTON, NEW MEXICO

REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No. 3602

Form 9-330

Form approved.
Budget Bureau No. 42-R355.4.

U. S. LAND OFFICE SANTA FE

SERIAL NUMBER 077922

LEASE OR PERMIT TO PROSPECT

MAR 13 1963
OIL CON. COM.
DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company AZTEC OIL AND GAS COMPANY Address P. O. DRAWER 570 FARMINGTON, N. MEX.

Lessor or Tract McGRATH Field BASIN DAKOTA State NEW MEXICO

Well No. C-1 Sec. 34 T. 30N R. 12W Meridian N.M.P.M. County SAN JUAN

Location 870 ft. [N.] of S Line and 1190 ft. [W.] of E Line of SECTION 34 Elevation 5771 G.L.
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed JOE C. SALMON Title DISTRICT SUPERINTENDENT

Date MARCH 7, 1963

The summary on this page is for the condition of the well at above date.

Commenced drilling FEBRUARY 7, 1963 Finished drilling FEBRUARY 18, 1963

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6387 to 6400 G

No. 2, from 6462 to 6484 G

No. 3, from 6542 to 6576 G

No. 4, from ____ to ____

No. 5, from ____ to ____

No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from ____ to ____

No. 2, from ____ to ____

No. 3, from ____ to ____

No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8 5/8	24	8 rd.	J-55	311					
4 1/2	9.5	8 rd.	J-55	6462					
2 3/8	4.7	8 rd.	J-55	6399					
4 1/2	11.6	8 rd.	J-55	1163					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	323	225	Displacement		
4 1/2	6637	925	Two Plug		
2 3/8	6408	----	----------		

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

FOLD | MARK

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

(1983)
y 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.: SF-07792 2

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Duff Gas Com

9. WELL NO.: 1E

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: SW/NE Sec. 34, T30N, R12

12. COUNTY OR PARISH: San Juan

13. STATE: NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: 501 Airport Drive, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1770' FNL x 1480' FEL
At top prod. interval reported below: Same
At total depth: Same

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OIL CON. DIV.
DIST. 3
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BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

14. PERMIT NO.: DATE ISSUED

15. DATE SPUDDED: 11/20/84
16. DATE T.D. REACHED: 12/2/84
17. DATE COMPL. (Ready to prod.): 1/7/85
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 5785' KB
19. ELEV. CASINGHEAD: 5772' GR
20. TOTAL DEPTH, MD & TVD: 6608'
21. PLUG, BACK T.D., MD & TVD: 6604'
22. IF MULTIPLE COMPL., HOW MANY*: single
23. INTERVALS DRILLED BY: → ROTARY TOOLS: 0-TD CABLE TOOLS:
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6396'-6576' Dakota
25. WAS DIRECTIONAL SURVEY MADE: Yes
26. TYPE ELECTRIC AND OTHER LOGS RUN: DIL-SP-GR-FDC-CNL-GR
27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#, K-55	316'	12-1/4"	295 c.f. Class B	
4-1/2"	10.5#, K-55	6608'	7-7/8"	Stage 1: 1,032 c.f. Class B 50:50 poz & tailed in with 118 c.f. Class B Neat (cont. on back)	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	6575'	

31. PERFORATION RECORD (Interval, size and number)
6576'-6558', 4 jspf, .50"; 6410'-6396', 6424'-6420', 6508'-6476', 6520'-6516', 2 jspf, .50", total of 180 holes.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(6558'-6576')	20,000 gal. 30# gel & 25,000# 20-40 sand
(6396'-6520')	70,000 gal. 70 quality foam & 90,000# 20-40 sand.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
1/30/85	Flowing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1/31/85	3	.75"			168		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
104 psig	397 psig			1344		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): To be sold

TEST WITNESSED BY: J. J. Barnett

35. LIST OF ATTACHMENTS: None

ACCEPTED FOR RECORD
FEB 14 1985
FARMINGTON RESOURCE AREA

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: Original Signed By: B. D. Shaw TITLE: Administrative Supervisor DATE: 2/4/85

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Diff. Res.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
11/20/84	1/7/85	6608'	6604'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
5772' GR	Dakota	6396'	6575'
Perforations			**Depth Casing Shoe**
6578'-6558', 6410'-6396', 6424'-6420', 6508'-6476', 6520'-6516'			6609'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4"	8-5/8", 24#	316'	295 c.f.
7-7/8"	4-1/2", 10.5#	6609'	3031 c.f.
	2-3/8"	6575'	

TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
1344 ~~1335~~	3 hrs.	168	
Testing Method (pilot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back pressure	1870 psig	2010 psig	.75"

NEW MEXICO
ERALS DEPARTMENT

P. O. BOX 2088
S, TA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

RION OIL & GAS CORPORATION		Lease: CARNAHAN COM		Well No.: 2
etter	Section: 35	Township: 30N	Range: 12W	County: San Juan

ual Footage Location of Well:
1090 feet from the South line and 1070 feet from the East line

und Level Elev.: 5905	Producing Formation: Dakota	Pool: Basin Dakota	Dedicated Acreage: 320 Acres

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

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

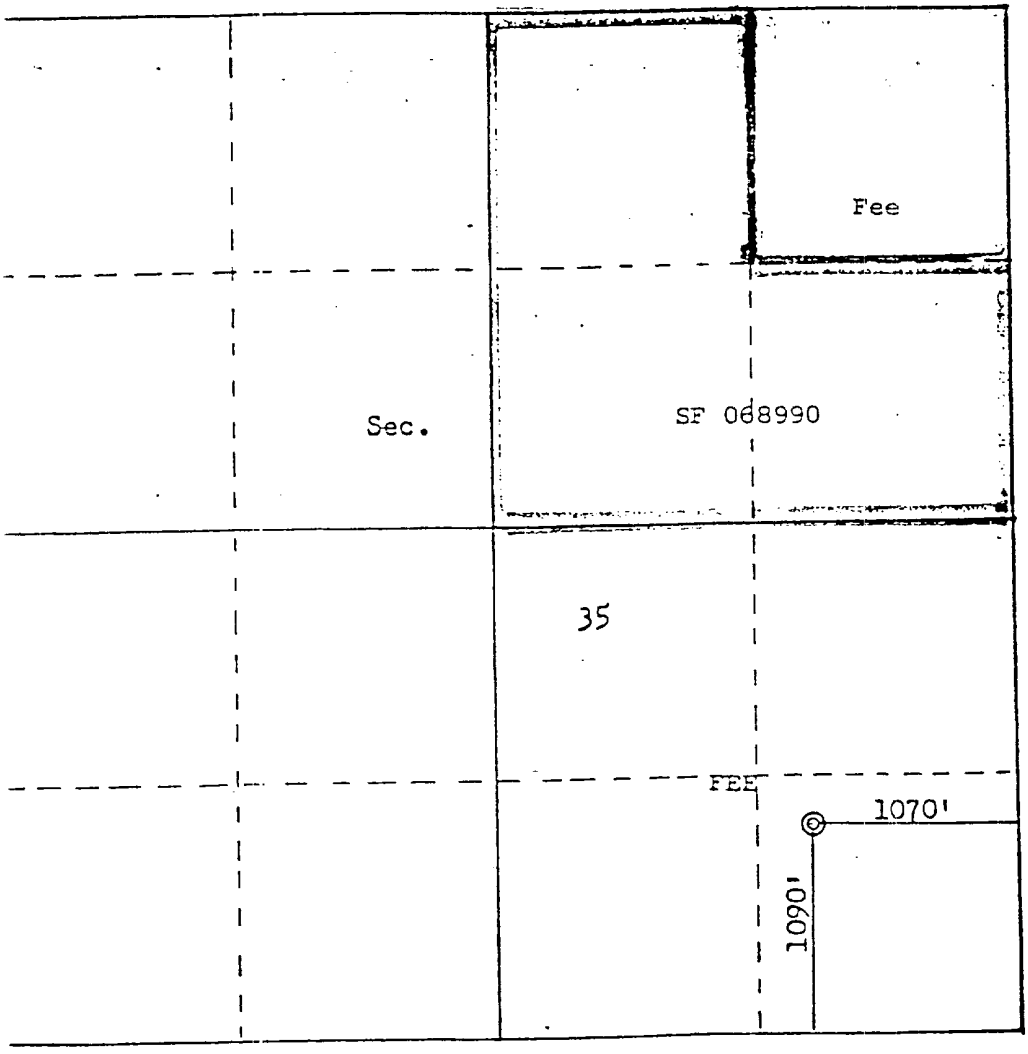
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

[X] Yes [ ] No If answer is "yes," type of consolidation Communitized

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

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

RECEIVED
NOV 21 1983
OIL CON. DIV.
DIST. 3



Scale: 1"=1000'

CERTIFICATION

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

Name: Steve S. Dunn
Position: Operations Manager
Company: Merrion Oil & Gas Corporation
Date: 11/17/83

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

Date Surveyed: September 1, 1983

Registered Professional Engineer and Land Surveyor.
Fred B. Kerr Jr.

Certificate No. 3950

FORM 24-11

Form C-105
Revised 10-1-78

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

...F NEW MEXICO
... MINERALS DEPARTMENT

...COPIES RECEIVED	
DISTRIBUTION	
...NTA FE	
...E	
U.S.G.S.	
...AND OFFICE	
OPERATOR	

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.
7. Unit Agreement Name

TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER
TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

8. Farm or Lease Name: Carnahan Com
9. Well No.: 2

Name of Operator: Merrion Oil & Gas Corporation
Address of Operator: P. O. Box 1017, Farmington, New Mexico 87499

AUG 7 1984
OIL CON. DIV.
DIST. 3

10. Field and Pool, or Wildcat: Basin Dakota

Location of Well: UNIT LETTER P LOCATED 1090 FEET FROM THE South LINE AND 1070 FEET FROM THE East LINE OF SEC. 35 TWP. 30N RGE. 12W NMPM

12. County: San Juan

14. Date Spudded	15. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
6/15/84	6/24/84	7/23/84	5918' KB	5905' GL

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
6780' KB	6735' KB		→	0 - TD	

24. Producing Interval(s), of this completion — Top, Bottom, Name
6714 - 6529' KB, Dakota

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run
IES Induction, compensated Density Logs

27. Was Well Cored: No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULL
8-5/8"	24 #/Ft, J-55	230' KB	12-1/4	170 sx (350 cu. ft.) Class B	
4-1/2"	10.5 #/Ft, J-55	6777' KB	7-7/8"	400 sx (488 cu. ft.) Class H	305 sx 396
				600 sx (1236 cu. ft.) Class B	
				100 sx (122 cu. ft.) Class B	201 22

LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-3/8"	6530' KB	

28. Perforation Record (Interval, size and number)
6529, 6538, 6541, 6617, 6620, 6625, 6629, 6632, 6700, 6705, 6710, 6714, 12 holes, 0.32" diameter.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
6529 - 6714' KB	75 Quality Foam
	434 Bbls H2O
	1,700,198 SCF N_2
	55,000 # 20/40 Sand

PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
7/23/84	Flowing	Shut in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
8/3/84	3	20/64		2 Bbls	603 MCF/D	trace	37,688

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)
850 PSI	950 PSI		16	603 MCF/D	trace	48°

Disposition of Gas (Sold, used for fuel, vented, etc.)
Vented

Test Witnessed By: Tim Merilatt

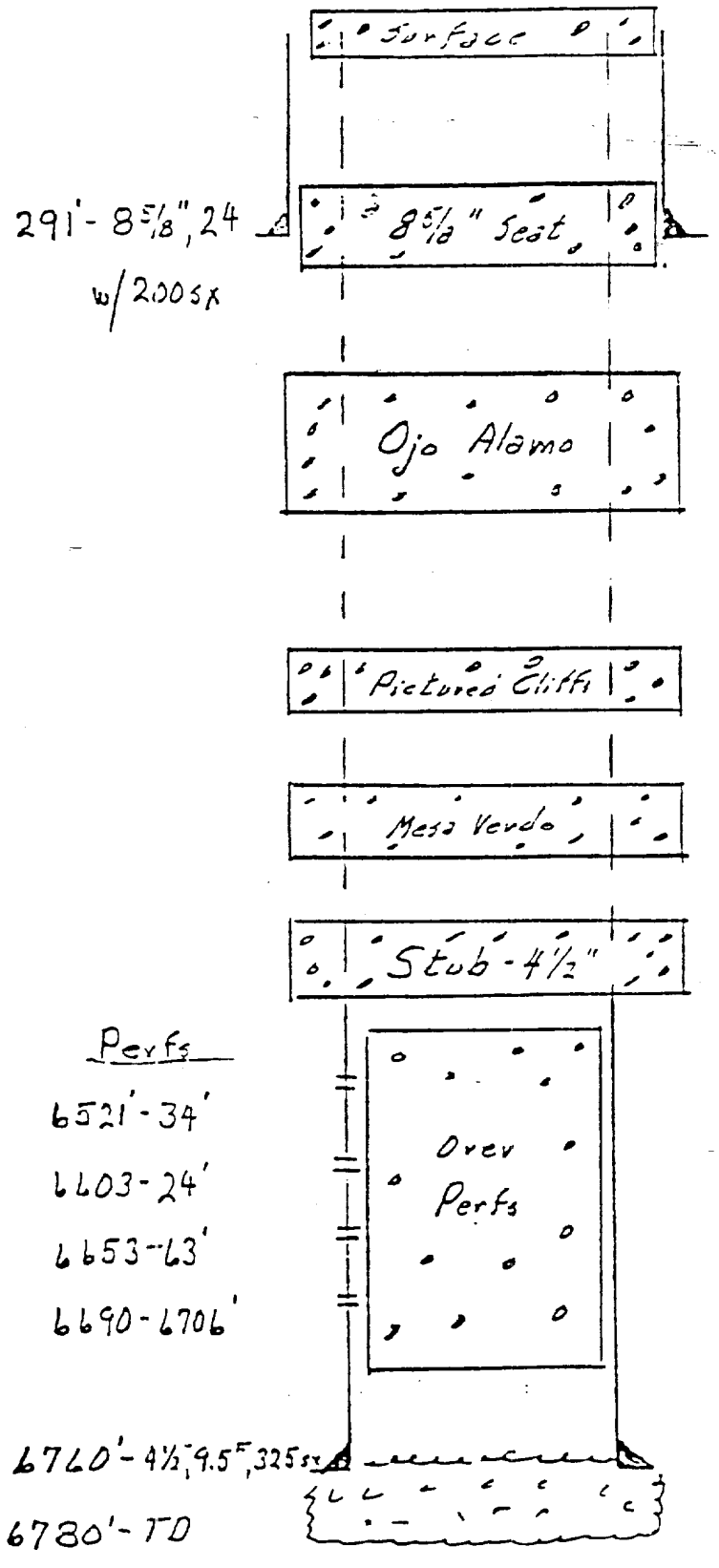
List of Attachments

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

8/6/84

Carnahan Unit #1
Basin Dakota Pool
Unit P, Sect 35, 30N, 12W
San Juan Co., New Mexico

G.L. 5911'



P & A

1. Plug over perfs & 100' to 6400'
2. Cut and pull free 4½" pipe
3. Plugs across —
   a. 4½" stub
   b. Mesa Verde
   c. Picture Cliffs
   d. Ojo Alamo
   e. 8 5/8" casing seat
   f. surface
4. Monument

JCG/4-2-71

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Aztec Oil & Gas Company	J. Hudson	3

Unit Letter	Section	Township	Range	County
E	35	30 North	12 West	San Juan

Actual Footage Location of Well:
1750 feet from the North line and 990 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5857	Dakota - Mesaverde	Basin Dakota Flora Vista Mesaverde (Ext.)	320 Acres

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

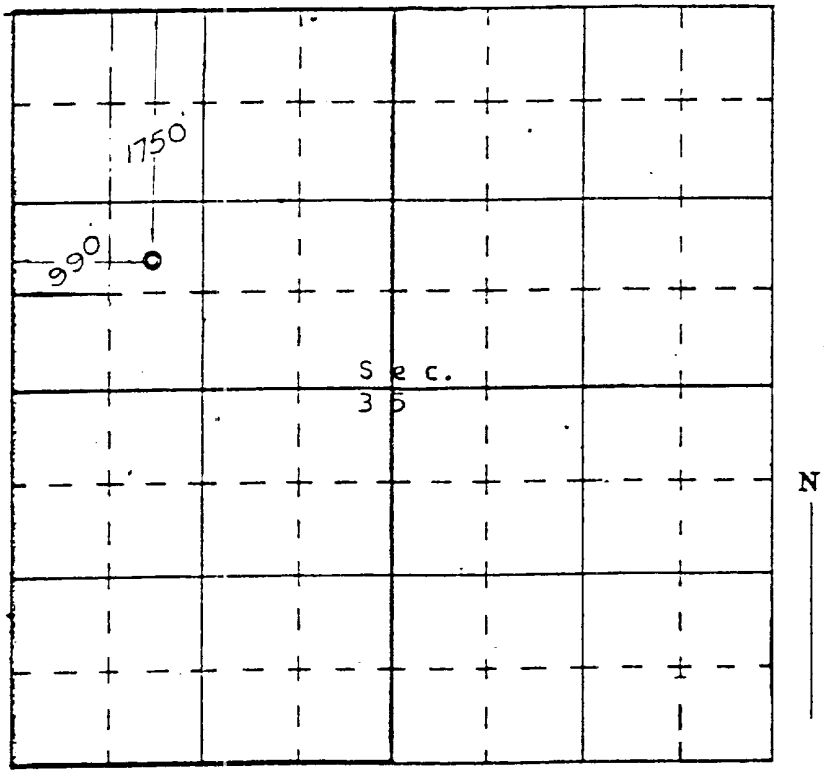
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

[X] Yes [ ] No If answer is "yes," type of consolidation Communitization

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

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



CERTIFICATION

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

ORIGINAL SIGNED BY JOE C. SALMON

Name

Position Joe C. Salmon

Company District Superintendent

Date Aztec Oil and Gas

May 27, 1966

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

Date Surveyed

March 31, 1966

Registered Professional Engineer and/or Land Surveyor

E. V. Echohawk

Certificate No. 3602

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED
AUG 25 1966
U. S. GEOLOGICAL SURVEY

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Aztec Oil and Gas

3. ADDRESS OF OPERATOR: Drawer 570 Farmington, New Mexico

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1750 FNL & 990 FWL Sec 35, T-30n, R-12W
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: SF 077922
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Hudson
9. WELL NO.: 3
10. FIELD AND POOL, OR WILDCAT: Basin Dakota
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec 35, T-30N, R-12W
12. COUNTY OR PARISH: San Juan
13. STATE: New Mexico
14. PERMIT NO.
DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7/22/66	8/4/66	8/15/66	5857 GL	5858

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6750	6732		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6460 - 6680

25. WAS DIRECTIONAL SURVEY MADE: no

26. TYPE ELECTRIC AND OTHER LOGS RUN: Es - Ind and Density log

27. WAS WELL CORED: no

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	306	12-1/4	250 ✓	
4-1/2	10.5#	6750	7-7/8	700 ✓	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1½	6597	

31. PERFORATION RECORD (*Interval, size and number*)
6460-80, 6540-62, 6567-72, 6580-85, 6668-80
4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6460-6668-80	1936 bbl H20 40,000# 20/40 20,000# 10/20 125 balls

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
	flowing	shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8/22/66	3 hr	3/4"					

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
170	747			2485		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): vented

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: [signature] TITLE: District Engineer DATE: August 23, 1966

*(See Instructions and Spaces for Additional Data on Reverse Side)

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
c Oil & Gas Company	Hudson	3

Unit Letter	Section	Township	Range	County
	35	30 North	12 West	San Juan

Actual Footage Location of Well: 1750 feet from the North line and 990 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage
5857	Dakota - Mesaverde	Basin Dakota Flora Vista Mesaverde (Ext)	320 Acres

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

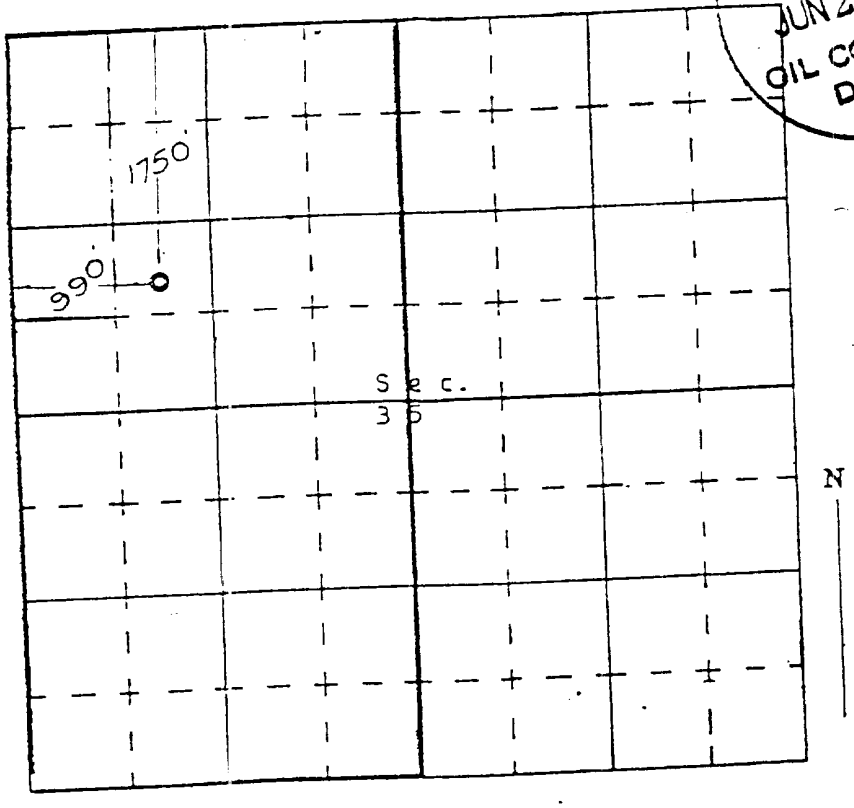
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

X Yes ( ) No If answer is "yes," type of consolidation Communitization

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

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



RECEIVED
JUN 2 1966
OIL CON. COM.
DIST. 3

CERTIFICATION

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

ORIGINAL SIGNED BY JOE C. SALMON

Name: Joe C. Salmon

Position: District Superintendent

Company: Aztec Oil and Gas

Date: May 27, 1966

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

Date Surveyed: March 31, 1966

Registered Professional Engineer and/or Land Surveyor

E. V. Echohawk

Certificate No. 3602

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Aztec Oil and Gas

Drawer 570 Farmington, New Mexico

Reason(s) for filing (Check proper box)

New Well [X]
Recompletion [ ]
Change in Ownership [ ]

Change in Transporter of:
Oil [ ] Dry Gas [ ]
Casinghead Gas [ ] Condensate [ ]

Other (Please explain)

If change of ownership give name and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Hudson	3	Basin Dakota	State Federal or Fee Fed	SF 077922

Unit Letter E; 1750 Feet From The North Line and 990 Feet From The West

Line of Section 35; Township 30N; Range 12W; NMPM, San Juan County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil or Condensate X — Address (Give address to which approved copy of this form is to be sent)
Plateau Incorporated — Box 108 Farmington, New Mexico

Name of Authorized Transporter of Casinghead Gas or Dry Gas X — Address (Give address to which approved copy of this form is to be sent)
Southern Union Gas Company — Box 815 Farmington, New Mexico

If well produces oil or liquids, give location of tanks. Unit — Sec. — Twp. — Rge. — Is gas actually connected? When
NO

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
7/22/66	8/9/66	6750	6732

Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
5857 GL	Dakota	6460-6680	6597

Perforations	Depth Casing Shoe
6460-80, 6540-62, 6567-72, 6580-85, 6668-80, 4 SPF	6750

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12¼	8-5/8"	306	250 SX
7-7/8"	4-1/2"	6750	750 SX
	1-1/2"	6597	

TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Oil Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
2485	3 hr		
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size
back pressure	170	747	3/4"

RECEIVED
SEP 2 1966
OIL CON. COM.
DIST. 3

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

ORIGINAL SIGNED BY JOE C. SALMON
(Signature)

District Superintendent
(Title)

August 31, 1966
(Date)

OIL CONSERVATION COMMISSION

APPROVED SEP - 2 1966, 19

BY Original Signed by Emery C. Arnold

TITLE SUPERVISOR DIST. #3

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

Submit to Appropriate
District Office
State Lease – 6 copies
Fee Lease – 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO. -

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER DISPOSAL

b. Type of Completion: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

7. Lease Name or Unit Agreement Name: SUNCO DISPOSAL

2. Name of Operator: COLEMAN OIL & GAS COMPANY

8. Well No.: #1

3. Address of Operator: 708 SOUTH TUCKER, FARMINGTON, NM 87401

9. Pool name or Wildcat: FLORA VISTA MESA VERDE

4. Well Location
Unit Letter E : 1595 Feet From The NORTH Line and 1005 Feet From The WEST Line

Section 2 Township 29N Range 12W NMPM SAN JUAN County

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF & RKB, RT, GR, etc.)	14. Elev. Casinghead
01-28-92		2-24-92	5859 GR.	5864

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
4760		1		X	

19. Producing Interval(s), of this completion - Top, Bottom, Name

20. Was Directional Survey Made: YES

21. Type Electric and Other Logs Run: DUEL INDUCTION & FORMATION DENSITY

22. Was Well Cored: NO

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24.0	209	12-1/4	250 sc Class B	0
5-1/2	15.50	4760	7-7/8	1st stage 230sx 65/35 & 265 Class B Tail.	0
				2nd stage 465sx 65/35 & 50sx "B" Tail.	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8	4300	4300

26. Perforation record (interval, size, and number)

4350-4460 2spf .46 220

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

PRODUCTION

28.

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
02-24-92	SWABBING	SHUT-IN

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
02-24-92	24	2"		TR.	3.2	164.99	19. CU/FT/BB

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)
0	315		0		164.99	NOT MEASURED

29. Disposition of Gas (Sold, used for fuel, vented, etc.): VENTED

Test Witnessed By: HAROLD ELLEDGE

30. List Attachments: PRODUCTION TEST

RECEIVED
FEB 28 1992
OIL CON. DIV.
DIST. 3

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Ron Maher Printed Name RON MAHAN Title CONTRACTS MGR Date 02-28-9

Submit to Appropriate
District Office
State Lease – 6 copies
Fee Lease – 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-101
Revised 1-1-89

API NO. (assigned by OCD on New Wells) 30-045-27453

5. Indicate Type of Lease STATE [ ] FEE [X]

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
DRILL [X] RE-ENTER [ ] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well:
OIL WELL [ ] GAS WELL [ ] OTHER SWD DISPOSAL X SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. Lease Name or Unit Agreement Name
SUNCO DISPOSAL
13795

2. Name of Operator
COLEMAN OIL & GAS COMPANY 4838

8. Well No.
#1

3. Address of Operator
700 SOUTH TUCKER, FARMINGTON, NM 87401

9. Pool name or Wildcat 76680
FLORA VISTA MESA VERDE

4. Well Location
Unit Letter E : 1595 Feet From The NORTH Line and 1005 Feet From The WEST Line

Section 2 Township 29N Range 12W NMPM SAN JUAN County

10. Proposed Depth 4760
11. Formation MESA VERDE
12. Rotary or C.T. ROTARY

13. Elevations (Show whether DF, RT, GR, etc.) 5859 GR.
14. Kind & Status Plug. Bond
15. Drilling Contractor BIG "A" WELL SERVICE
16. Approx. Date Work will start 1-28-92

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4	8-5/8	24.0	200	200	SURFACE
7-7/8	5-1/2	15.50	4760	900	SURFACE

We propose to drill, log, and set casing through the point lookout member of the Mesa Verde and upon examination of the logs, a portion of the point lookout will be selectively perforated and stimulated as needed.

RECEIVED
FEB 28 1992
OIL CON. DIV
DIST.

APPROVAL EXPIRES 9-5-92
UNLESS DRILLING IS COMMENCED.
SPUD NOTICE MUST BE SUBMITTED
WITHIN 10 DAYS.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

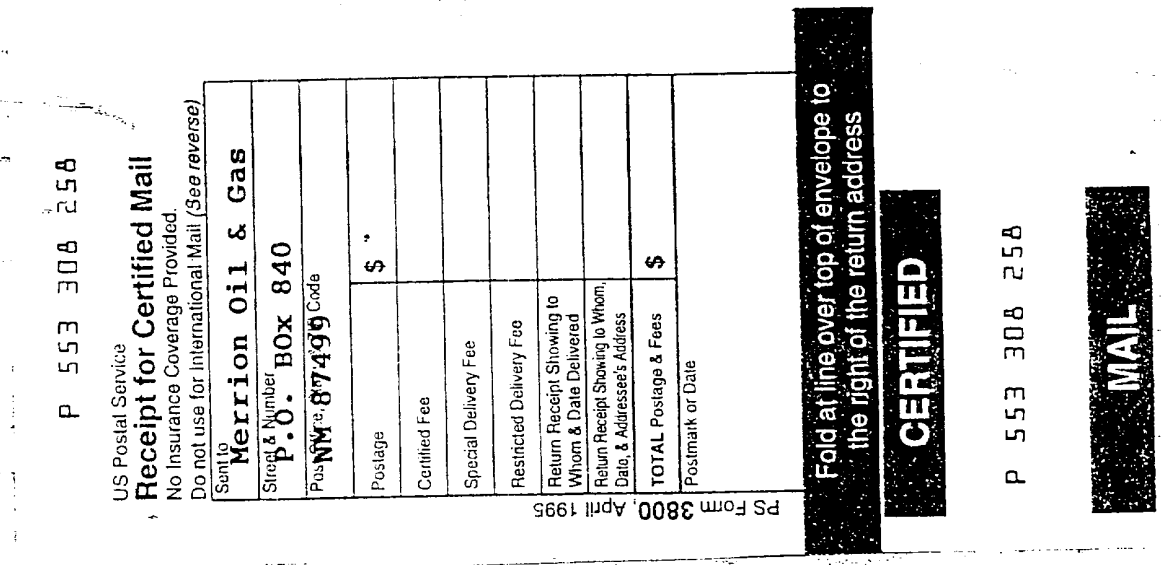
SIGNATURE [signature] TITLE CONTRACTS MANAGER DATE 02/28/92

TYPE OR PRINT NAME RON MAHAN TELEPHONE NO 327-4961

(This space for State Use)

APPROVED BY [signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE MAR 05 199

CONDITIONS OF APPROVAL, IF ANY:



Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Merrion Oil & Gas
P.O. Box 840
Farmington NM 87499

4a. Article Number
P 553 308 258

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

P 553 308 259

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to	Meridian Oil
Street & Number	P.O. Box 4289
Post Office, State, & ZIP Code	NM 87499
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 553 308 259

MAIL

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Meridian Oil Company
P.O. BOx 4289
Farmington NM 87499

4a. Article Number
P 553 308 259

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*
X

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811**, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

SUNCO TRUCKING COMPANY
WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

May 3,1996

Merrion Oil & Gas
P.O. Box 840
Farmington NM 87499
Phone: 505-327-9801

Gentleman:

Reference: Reclassification of Sunco SWD.

Sunco Trucking is in the process of applying for a new classification from Class II to Class I disposal to accept only RCRA exempt non-hazardous oil and gas wastes. The attached is a copy of that application.

Thank You,

Chuck Badsgard
Vice-President of Sunco Trucking

SUNCO TRUCKING COMPANY
WATER AND OILFIELD HEAVY HAULING P.O. BOX 800, FARMINGTON, NM 87499 (505) 327-0416

May 3, 1996

Meridian Oil
P.O. Box 4289
Farmington NM 87499
Phone: 505-326-9700

Gentleman:

Reference: Reclassification of Sunco SWD.

Sunco Trucking is in the process of applying for a new classification from Class II to Class I disposal to accept only RCRA exempt non-hazardous oil and gas wastes. The attached is a copy of that application.

Thank You,

Chuck Badsguard
Vice-President of Sunco Trucking

Form C & G B-
Adopted 6-17-7
Revised 11-01-8

STATE OF NEW MEXICO

ONE-WELL PLUGGING BOND

For CHAVES, EDDY, LEA, MCKINLEY, RIO ARRIBA, ROOSEVELT, SANDOVAL, AND SAN JUAN COUNTIES ONLY

BOND NO. U2723755

AMOUNT OF BOND $17,800.00

COUNTY SAN JUAN

NOTE: For wells less than 5,000 feet deep, the minimum bond is **$5,000.00***
For wells 5,000 to 10,000 feet deep, the minimum bond is **$7,500.00***
For wells more than 10,000 feet deep, the minimum bond is **$10,000.00**

*Under certain conditions, a well being drilled under a $5,000.00 or $7,500 bond may be permitted to be drilled as much as 500 feet deeper than the normal maximum depth, i.e., a well being drilled under a $5,000.00 bond may be permitted to go to 5,500 feet, and a well being drilled under a $7,500.00 bond may be permitted to go to 10,500 feet. (See Rule 101)

File with Oil Conservation Division, 2040 South Pacheco, Santa Fe, NM 87505

KNOW ALL MEN BY THESE PRESENTS:

That KEY FOUR CORNERS, INC. DBA BIG A WELL SERVICE/SUNCO TRUCKING (An individual) (a partnership) (a corporation organized in the State of NEW MEXICO, with its principal office in the city of FARMINGTON, State of NEW MEXICO, and authorized to do business in the State of New Mexico), as PRINCIPAL, and UNITED PACIFIC INSURANCE COMPANY, a corporation organized and existing under the laws of the State of PENNSYLVANIA, and authorized to do business in the State of New Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil Conservation Division of New Mexico pursuant to Section 70-2-12, New Mexico Statutes Annotated, 1978 Compilation, as amended, in the sum of $17,800.00 Dollars lawful money of the United States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas lease, or carbon dioxide (CO2) gas leases, or helium gas leases or brine mineral leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO2) gas leases, or helium gas leases or brine mineral leases on lands patented by the United States of America to private individuals, and on lands otherwise owned by private individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has commenced or may commence the drilling of one well not to exceed a depth of 4999 feet, to prospect for and produce oil or gas, or carbon dioxide (CO2) gas or helium gas, or brine minerals, or does own or may acquire, own or operate such well, or such well started by others on land embraced in said State oil and gas leases, or carbon dioxide (CO2) leases, or helium gas leases, or brine mineral leases, and on land patented by the United States of America to private individuals, and on land otherwise owned by private individuals, the identification and location of said well being

1595 FT FROM [illegible] LINE & 1005 FT FROM WEST LINE Section 2 Township 29 N (North) (South),
SUNCO DISPOSAL WELL #1
(Here state exact legal footage description and name of well)
Range 12 W (East) (West) N.M.P.M., SAN JUAN County, New Mexico.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or assigns, or any of them, shall plug said well when dry or when abandoned in accordance with the rules, regulations, and orders of the Oil Conservation Division of New Mexico in such way as to confine the oil, gas, brine and water in the strata in which they are found, and to prevent them from escaping into other strata;

THEN THEREFORE, This obligation shall be null and void; otherwise and in default of complete compliance with any and all of said obligations, the same shall remain in full force and effect.