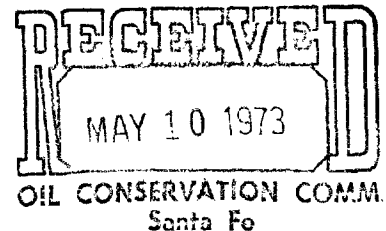




Production Department
Casper Division

Western Hemisphere Petroleum Division
Continental Oil Company
152 North Durbin
Casper, Wyoming 82601
(307) 234-7311

May 2, 1973



New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico 87401

Attention Mr. Emery C. Arnold

Gentlemen:

Jicarilla 30 No. 1

Application to Convert to Water Disposal
Rio Arriba County, New Mexico
File: PC-410-CF

SWD-140

Due May 25

Enclosed is application to recomplete the subject well, located in Unit "A" of Section 30, T25N, R4W, as a produced water disposal well in the Mesaverde formation. It is planned to inject produced water from all leases in the field at a rate of approximately 80 BWPD at 1200 psi.

Continental Oil Company requests cancellation of Administrative Order No. SWD-131 for the disposal of produced water into Jicarilla 28 No. 2, Unit "D" of Section 27, T25N, R4W, which was approved December 29, 1972. The conversion of Jicarilla 28 No. 2 is now considered economically unfeasible, and disposal of produced water will be made into Jicarilla 30 No. 1

Very truly yours,

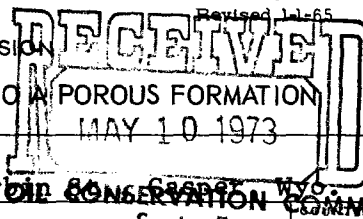
J. A. Ubben

J. A. Ubben
Administrative Supervisor

bjs
enc

CC: U. S. Geological Survey
Box 1809
Durango, Colorado



NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Continental Oil Company		ADDRESS 152 North Durbin Street, Santa Fe, NM 87601	
LEASE NAME Jicarilla	WELL NO. 1	FIELD West Lindreth	Rio Arriba
LOCATION UNIT LETTER A ; WELL IS LOCATED 915 FEET FROM THE North LINE AND 330 FEET FROM THE East LINE, SECTION 30 TOWNSHIP 25N RANGE 4W NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	10 3/4"	250'	250	Surface	Circulated
INTERMEDIATE					
LONG STRING	5 1/2"	7500'	350	6100'±	Circulated
TUBING	2 3/8"	5100'±	Baker Lok-Set	@ 5100'±	
NAME OF PROPOSED INJECTION FORMATION Mesaverde			TOP OF FORMATION 4846'	BOTTOM OF FORMATION 5585'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? 2 3/8" Tubing		PERFORATIONS OR OPEN HOLE? Perforations	PROPOSED INTERVAL(S) OF INJECTION 5171-80, 5182-92, 5401-06, 5411-32		
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Test Cretaceous & Jurassic sands			HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 7352-98' (50 sks); 6620-70' (400 sks); 6500-6610' (will squeeze w/100 sks)					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Unknown		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 3600'± (Pictured Cliffs)		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 6750'± (Gallup)	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 80	MINIMUM 0	MAXIMUM 500	OPEN OR CLOSED TYPE SYSTEM Open	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 1200 psi - Max.
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes			WATER TO BE DISPOSED OF Yes	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Federal Land - Jicarilla Apache Tribe					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL El Paso Natural Gas Co., P.O. Box 1492, El Paso, Texas 79978					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes					
SURFACE OWNER Yes					
EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes					
THE NEW MEXICO STATE ENGINEER ?					
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes					
PLAT OF AREA Yes					
ELECTRICAL LOG ?					
DIAGRAMMATIC SKETCH OF WELL Yes					

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

(Signature)Administrative Supervisor
(Title)5/2/73
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

NMOCC(3) USGS(2) El Paso File

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

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

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

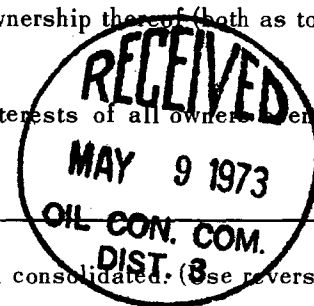
Operator Continental Oil Company			Lease Jicarilla 30			Well No. 1		
Unit Letter A	Section 30	Township 25N		Range 4W	County Rio Arriba			
Actual Footage Location of Well:								
915	feet from the North		line and	330	feet from the East		line	
Ground Level Elev: 6980'	Producing Formation P&A April, 1954			Pool Mesaverde		Dedicated Acreage: 160 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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

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

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



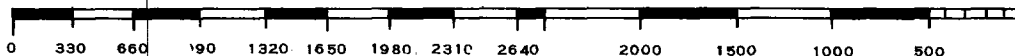
CERTIFICATION

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

Name *J. A. Uhlen*
 Position **Administrative Supervisor**
 Company **Continental Oil Company**
 Date **May 2, 1973**

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 _____
 Registered Professional Engineer and/or Land Surveyor _____
 Certificate No. _____





UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions on reverse side)Form approved.
Budget Bureau No. 42-R1424.

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.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection		5. LEASE DESIGNATION AND SERIAL NO. Contract No. 41	
2. NAME OF OPERATOR Continental Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache	
3. ADDRESS OF OPERATOR 152 North Durbin St., Casper, Wyo. 82601		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 915' FNL, 330' FEL		8. FARM OR LEASE NAME Jicarilla 30	
14. PERMIT NO.		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6980' GR 6990' RBM		10. FIELD AND POOL, OR WILDCAT W. Lindreth - Mesaverde	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 30, T25N, R4W	
		12. COUNTY OR PARISH Rio Arriba	
		13. STATE New Mexico	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input checked="" type="checkbox"/> Water Injection			

(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.)*

Well History

Well drilled to TD 8715' and found to be noncommercial. 5½" casing was set at 7500' and cement plug 8625-8475' and 7800-7725'. The Greenhorn was perforated 7398-7352', tested dry and cement squeezed. Perforated 6670-6620', tested dry and cement squeezed. Perforated 6610-6500', tested dry. The well was plugged and abandoned by filling the casing with heavy mud and setting a 15' cement plug at the surface in April, 1964.

Proposed Work

Clean out the well and squeeze cement the perfs 6610-6500'. Perforate at 5500' and cement squeeze, perforate at 4840' and cement squeeze. Drill out cement to 5600', set bridge plug at 5550' and perforate Mesaverde 5180-71', 5192-82', 5406-01' and 5432-11'. Run tubing with packer set at 5100', acidize the perfs with 1000 gallons and connect the well for water injection.

18. I hereby certify that the foregoing is true and correct

SIGNED

J. A. When

TITLE

Administrative Supervisor

DATE

5/2/73

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

PRODUCED WATER ANALYSIS

1. Jicarilla 22 Lease

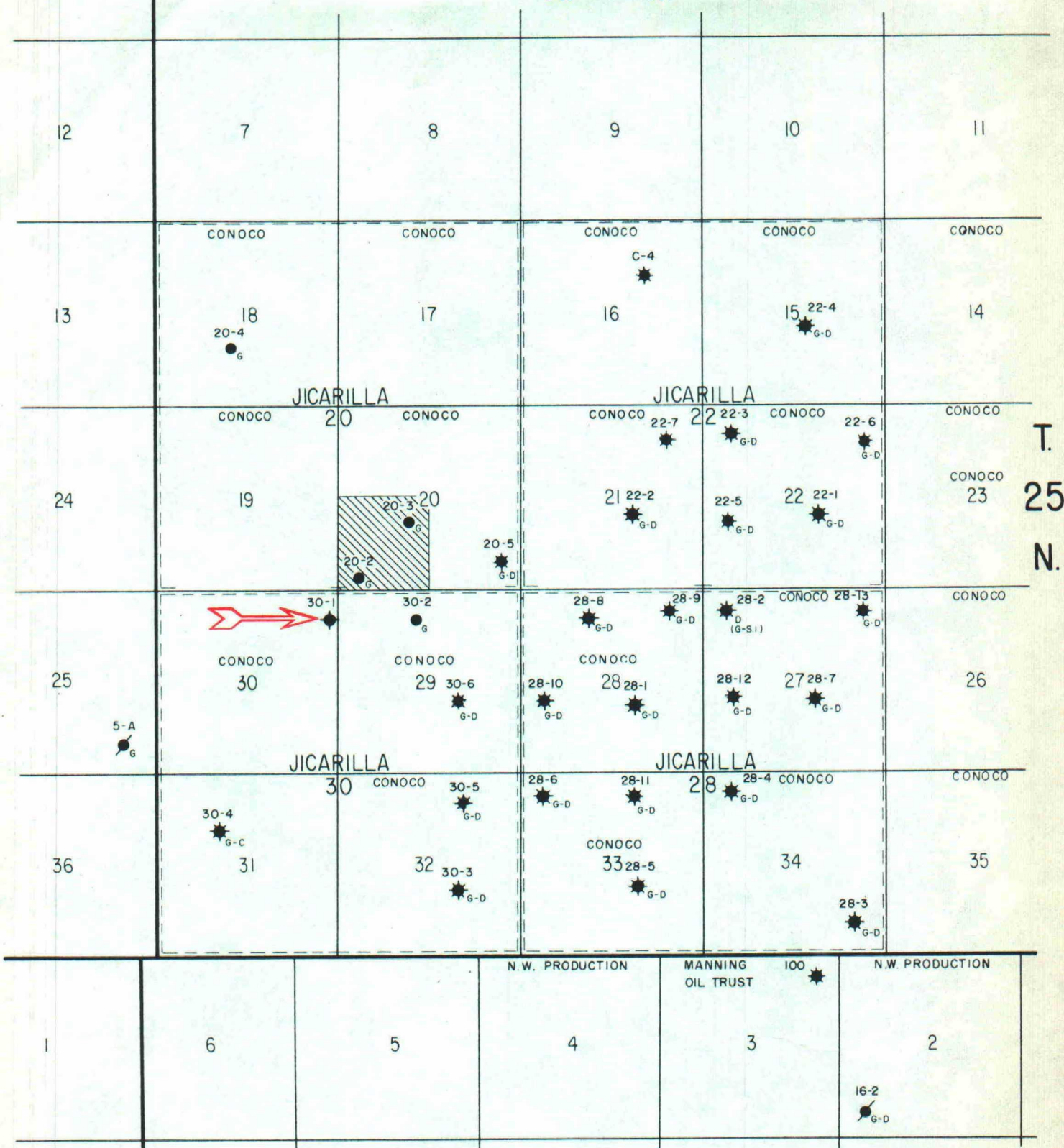
Sp. Gr. 1.011, Rw @ 73°F .471 ohm meters, pH 7.6

	<u>Meq/L</u>	<u>Mg/L</u>
Total Salts		14,400
H ₂ S		0
Cl	188.98	6,700
SO ₄	35.39	1,700
CO ₃	0	0
HCO ₃	10.80	659
Na	222.23	5,110
Mg	3.21	39
Ca	9.78	196
Fe (mg/L)	T 13.7	D 0
Sus. Sol.		120

2. Jicarilla 28 Lease

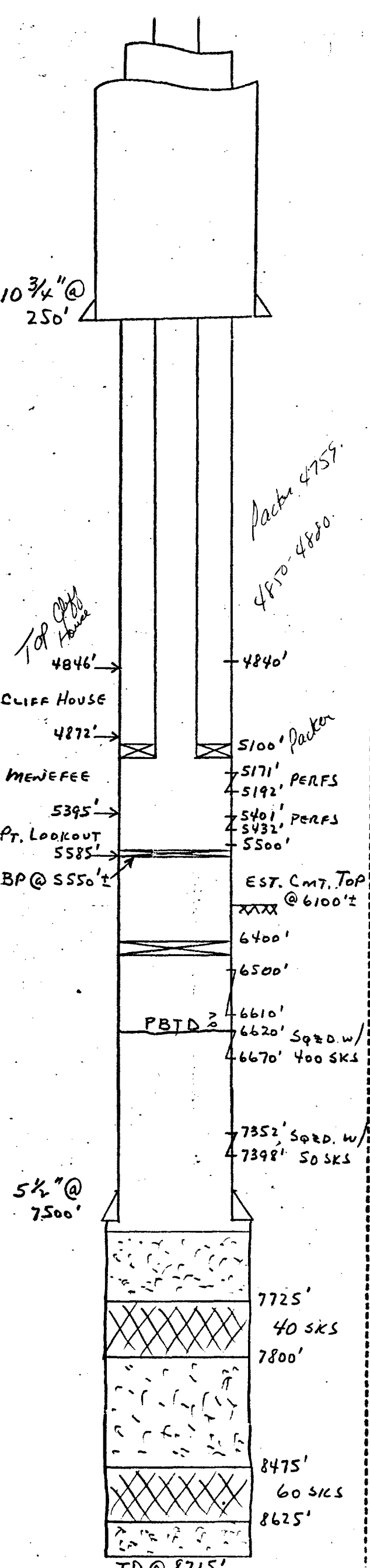
Sp. Gr. 1.010, Rw @ 73°F .505 ohm meters, pH 7.5

	<u>Meq/L</u>	<u>Mg/L</u>
Total Salts		12,600
H ₂ S		0
Cl	183.91	6,520
SO ₄	11.87	570
CO ₃	0	0
HCO ₃	12.19	744
Na	195.30	4,490
Mg	3.04	37
Ca	9.58	192
Fe (mg/L)	T 7.1	D 0.1
Sus. Sol.		105



LOCATION
GALLUP OIL WELL
DAKOTA OIL WELL
DUAL - GALLUP (Oil) CHACRA (Gas)
DUAL - GALLUP (Oil) DAKOTA (Oil-Gas)
SHUT-IN WELL
ABANDONED WELL

Engineer: _____ Date: 7-12-71
Scale = 4000' Well Status Posted to: 11-72



FIELD WEST) LINDRETH

POOL & WELL NO. MESA VERDE No 30-1

WELL STATUS PROPOSED-PRODUCED WATER DISPOSAL

LOCATION 915 FNL, 330 FEL, (NENE) SEC. 30, T25N, R4W, RIO ARRIBA Co., NEW MEXICO

ELEVATION 6980' GRD RBM

TOTAL DEPTH 8715' PLUG DEPTH 5550' ±

SURFACE CASING 10 3/4", 32.75", J-55 @ 250'

CMTD. W/ 250 SKS

PRODUCTION CASING 5 1/2", 15.5" & 17" J-55 & N-80 @ 7500', CMTD. W/ 350 SKS. SQUEEZED W/ 670 SKS. EST. CMT. TOP @ 6100' ±

PROPOSED COMPLETION IN MESA VERDE -

- 1- SET CEMENT RETAINER @ 6400' ±, SQZ. PERFS - 6500'-6610' W/ 100 SKS.
- 2- PERF @ 5500' ± W/ 4 JPF & SQZ. W/ 100 SKS
- 3- PERF @ 4840' ± W/ 4 JPF & SQZ. W/ 100 SKS
- 4- DRILL OUT TO 5600' ±
- 5- SET DRILLABLE B.P. @ 5550' ±
- 6- PERF 5171'-80'; 5182'-92'; 5401'-06'; 5411'-32' TOTAL - 45'
- 7- RUN 2 3/8" TUBING W/ PACKER. SET PACKER @ 5100' ±
- 8- ACIDIZE PERFS W/ 1000 GALS 15% HCL & PLACE WELL ON INJECTION.

REMARKS ALL MEASUREMENTS FROM RB

TOPS - CLIFF HOUSE - 4846' (MESA VERDE)

MENEFEES - 4872'

POINT LOOKOUT - 5395' to 5585'

PREPARED BY: DEAN BARNES DATE: 5-1-72

10 3/4" @
250'4846' →
CLIFF HOUSE
4872' →
MENEFFEE
5395' →
PT. LOOKOUT
5585' →EST. CMT. TOP
@ 6100'

XXX

6500'

PBTD ?

6610'

6620' SQED. W/

6670' 400 SKS

7352' SQED. W/

7398' 50 SKS

5 1/2" @
7500'

7725'

40 SKS

7800'

8475'

60 SKS

8625'

FIELD WEST LINDRETHPOOL & WELL NO. No 30-1WELL STATUS PRESENT - P/A 4-54LOCATION 915' FNL, 330' FEL, (NENE) SEC 30,
T25N, R4W, RIO ARRIBA Co., NEW MEXICOELEVATION 6980' GRD 6990' RBMTOTAL DEPTH 8715' PLUG DEPTH 6620' ±SURFACE CASING 10 3/4", 32.75", J-55 @ 250'CMTD. W/ 250 SKSPRODUCTION CASING 5 1/2", 15.5" & 17" J-55 & N-80@ 7500'. CMTD. W/ 350 SKS. EST. CMT.TOP @ 6100' ±PRESENT COMPLETION P/A 5 1/2" LEFT IN HOLECMT. PLUGS BELOW 5 1/2" - 8475'-8625' &7725'-7800' CMT RET. DRILLED OUT & PUSHED
TO 6620' ±

PUMP UNIT

HISTORY COMPLETED IN UPPER NIOBRARA &GREENHORN LS. - NON COMMERCIAL 3-54CMT. PLUGS AS FOLLOWS ON COMPLETION PRIOR
TO SETTING 5 1/2" CSG - 8475'-8625' &7725'-7800' - PERF GREENHORN 7352'-98'TREATED & TSTD. DRY - SQED W/ 50 SKSPERF (?) SET RETAINER @ 6500'SQED. W/ 670 SKS IN 7 JOBS - DRILLEDOUT TO ? - PERF GREENHORN 6620'-70'TREATED & TSTD DRY - SQED W/ 400 SKS. DRILLEDOUT TO 6620' ± PERF 6500'-6610' TREATED &TSTD DRY. P/A BY FILLING CSG. W/HVY MUD & 15 FT. CEMENT PLUG AT SURFACE.REMARKS ALL MEASUREMENTS FROM RB.TOPS - CLIFF HOUSE - 4846' (MESAVARDE)MENEFFEE - 4872'POINT LOOKOUT - 5395' GREENHORN - 7338'UPPER NIOBRARA - 6452' LOWER - 6903'PREPARED BY: DEAN BARNES DATE: 5-1-73