

Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80295
(303) 861-5252

P.O. BOX 2038
FARMINGTON, NEW MEXICO 87401

RECEIVED
MAY 03 1982
OIL CONSERVATION DIVISION
March 5, 1982 SANTA FE

STATE OF NEW MEXICO
Energy & Minerals Department
Oil Conservation Division
1000 Brazos Road
Aztec, New Mexico

Attn: Mr. Frank Chavez

Dear Mr. Chavez,

Consolidated Oil & Gas, Inc. hereby requests authorization to commingle the Basin Dakota and undesignated Gallup formations within the wellbore in our Cain 1-E, 1450' F/SL & 1105 F/EL, Unit J -P- Sec. 25, T31N, R13W, San Juan County, New Mexico.

The Gallup formation has never been commercially productive. After fracturing the Gallup, it was swab tested, recovering 4 bbl of oil and a trace of water per day. The gas was too small to measure but would burn a 2 - 3 foot flare. The Gallup formation would never flow on its own.

The Dakota formation will log off with water, so we have been shutting in the Dakota for 3 - 5 days and producing this zone behind a compressor. This is why the 24 hour production test on Form C-116 is above 50 mcf daily average. The well had recently been turned on.

Consolidated would like to commingle the Gallup & Dakota; allocating 10% oil and 95% gas to the Dakota and 90% oil and 5% gas to the Gallup formations, based on production curves and previous well tests.

Enclosed please find information requested.

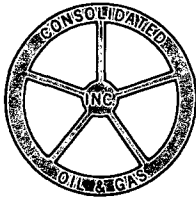
Sincerely,

Barney Jones

BARNEY JONES
Drilling Foreman

BJ/ke
Encls.

OK
P.G.



Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80295
(303) 861-5252

P.O. BOX 2038
FARMINGTON, NEW MEXICO 87401



March 5, 1982

NEW MEXICO OIL CONSERVATION COMMISSION
1000 Brazos Road
Aztec, New Mexico



RE: CAIN 1-E
P - Sec. 25, T31N, R13W
Basin Dakota/Undesig. Gallup
San Juan County, New Mexico
Administrative Order #MC-7769
Authorization for Dual Completion

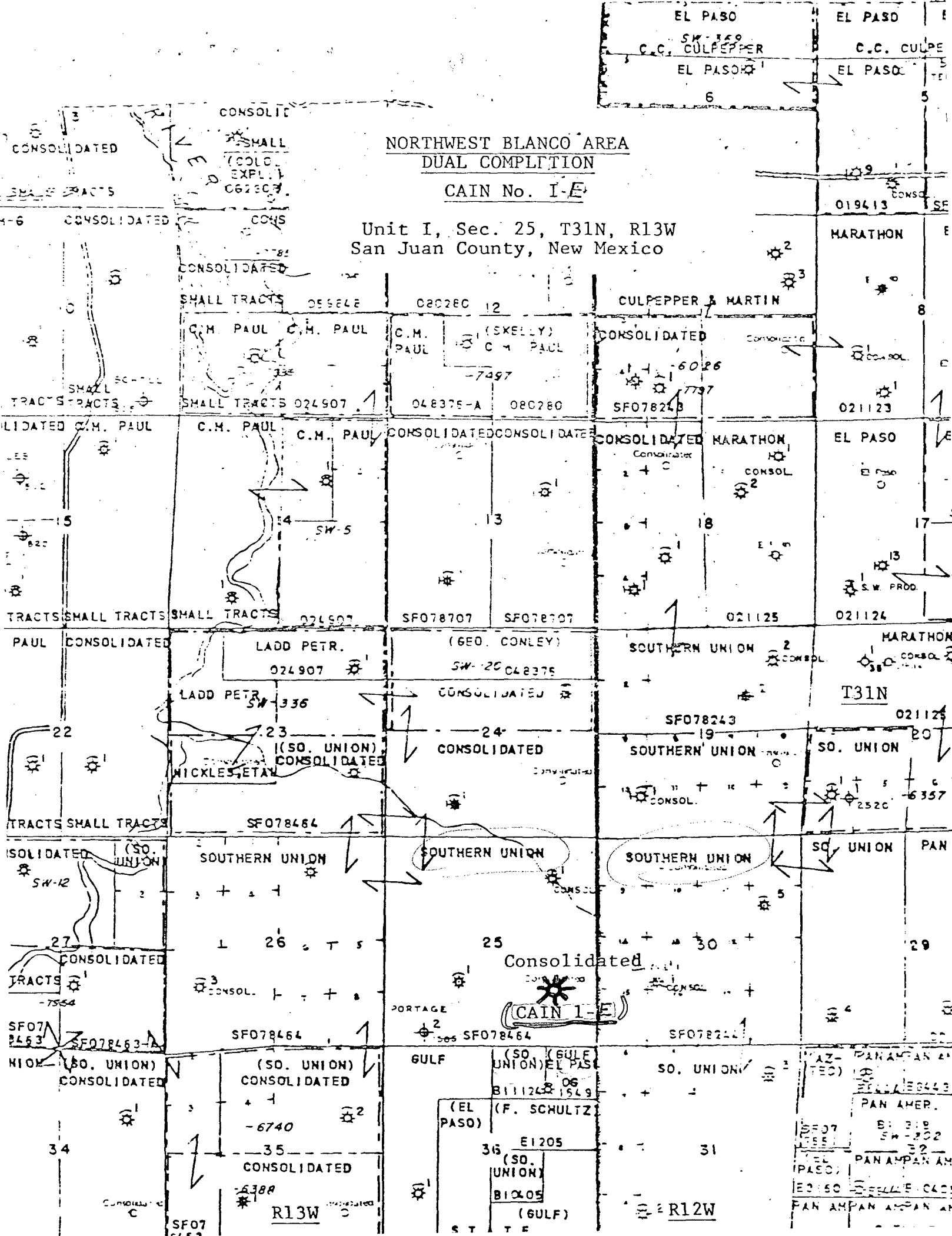
Gentlemen;

Enclosed please find information requested by the
Commission for application to down-hole commingle, Rule 303.

Sincerely,

BARNEY JONES
Drilling Foreman

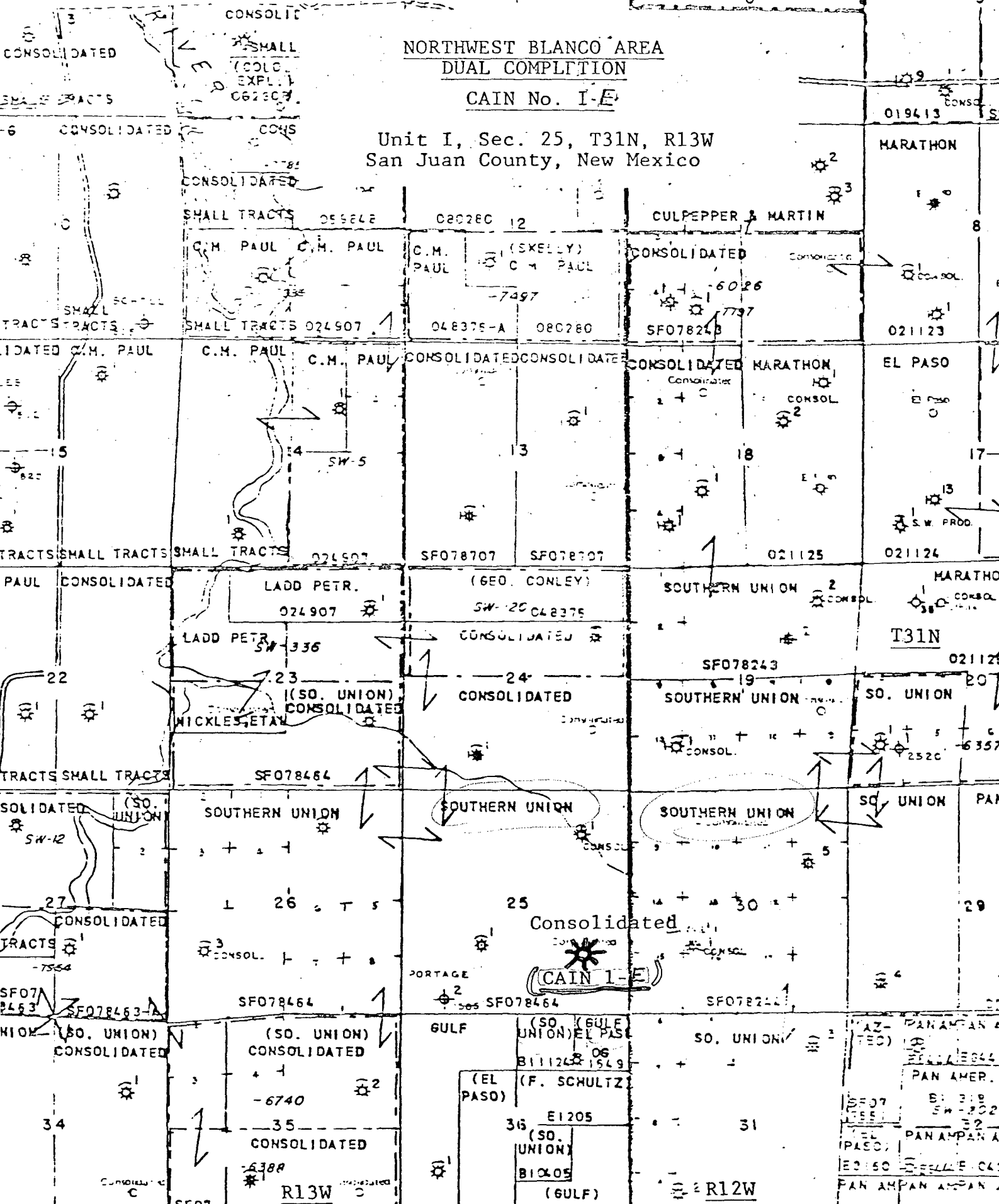
BJ/ke
Encls.



NORTHWEST BLANCO AREA
DUAL COMPLETION

CAIN No. I-E

Unit I, Sec. 25, T31N, R13W
San Juan County, New Mexico



Consolidated
(CAIN 1-E)

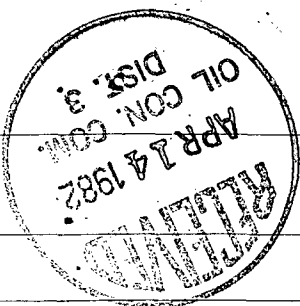
R13W

R12W

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County												
Consolidated Oil & Gas		Basin Dakota		San Juan												
Address		Type of Test - (X)		Completion		Special										
P.O. Box 2038, Thermistown, N.M.		☒		☐		☒										
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	STATUS	ORIFICE SIZE	PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.	
		U	S	T							R	WATER BBLs.	GRAV. OIL BBLs.	GAS M.C.F.		GAS
Cain Dakota	1E	I	25	31	13	2/10/82	F	5/8	340	82	24	27.5	602	1/3	118	336 mcf/1000
Cain Gallup	1E	I	25	31	13	TA										



No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

[Signature]
(Signature)
[Signature]
(Title)
2/10/82
(Date)

CAIN 1-E
Sec. 25, T31N, R13W

March 5, 1982

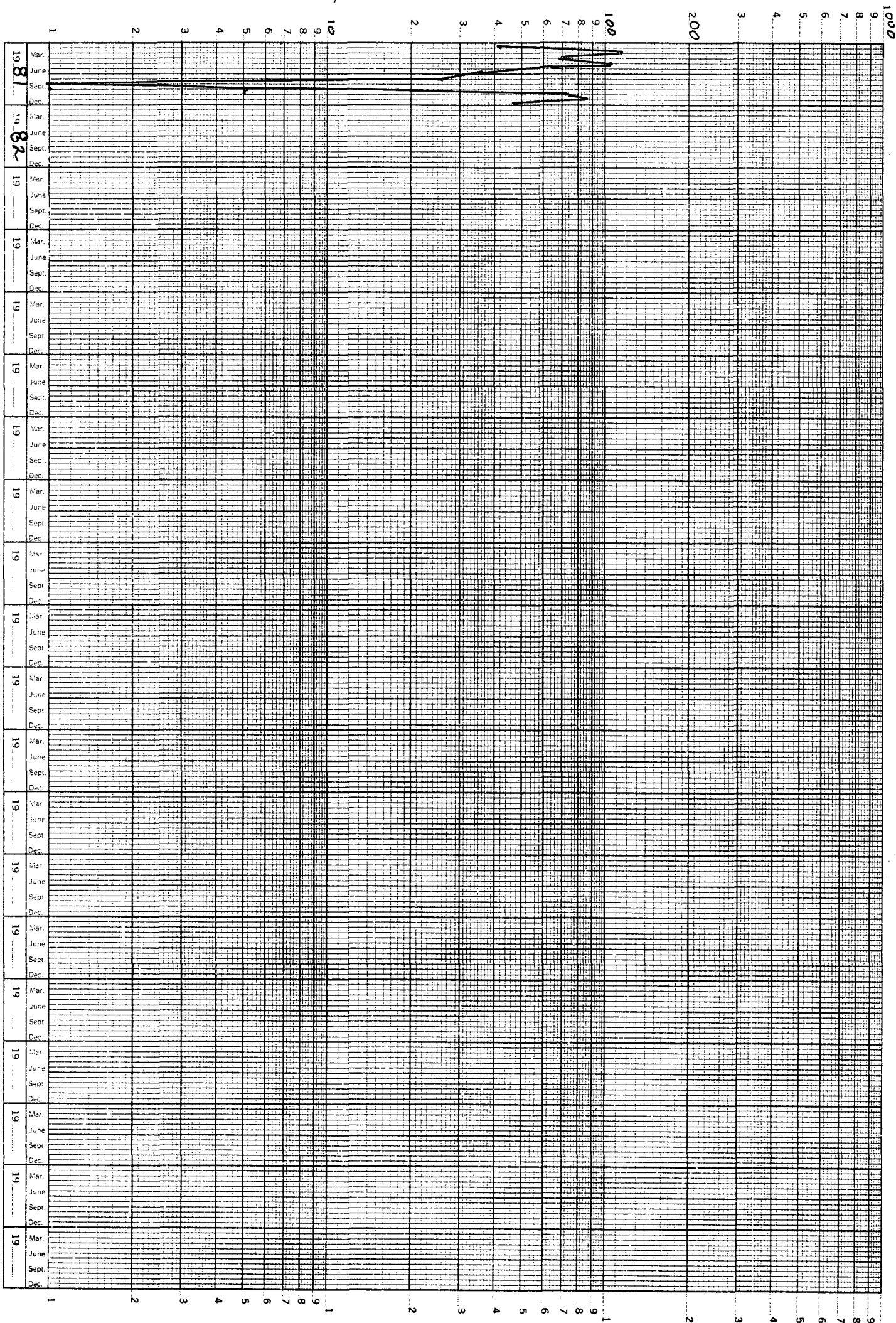
RE: Rule 303, Sec. C, Para. 2, Requirement (e)

Along with production decline curves, we are submitting
Form C-103, showing completion procedures.

The production on the Cain 1-E should be substantially
increased by commingling Dakota and Gallup gas within the
wellbore. The well will be able to utilize the full volume
of the casing gas, which will allow the well to lift more
fluids.

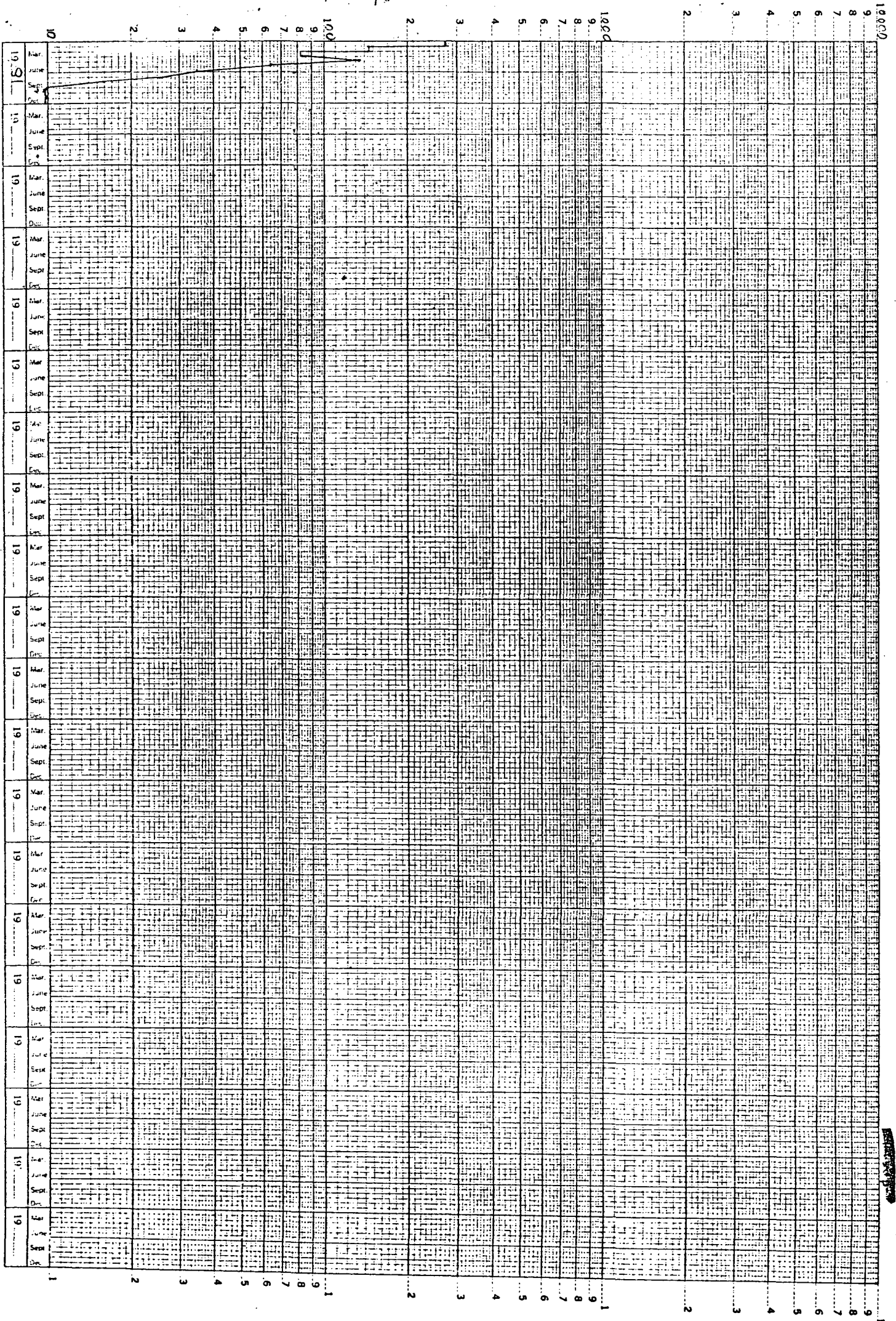


AVG MCF/LA



RAIN I-E OK

11 CF/PD



CALL UP

CHAIN 1-E
30-425-0701-95
SAIL TUNN CO. N M

250 x C1 "5" w/2% CaCl_2

Circulated to surface

12-1/4" hole to 276'

8-5/8", 24#, K-55, ST&C

@ 256' KB

Cement stage collar at 2418'.

Cemented with 450 sk. 65-35 Pozmix, 6% gel followed with 100 sk. 50-50 Pozmix, 2% gel, 0.6% D-60, 1/4#/sk Floseal on 5/31/80.

1-1/2", 2.9#, CW-55, 10 rd.,

EUE tubing at 6780', 208 jt.

Cement stage collar @ 4961'

Cemented with 450 sk. of 50-50 Pozmix, 2% gel, 0.6% D-60, 1/4#/sk Floseal

Model "D" Production Packer set at 6250'.

7-7/8" hole to 7125'.

5-1/2", 15.5#, K-55, ST&C

casing @ 7118' with 100 sk. 65-35 Pozmix, 6% gel, followed by 250 sk 50-50 Pozmix, 2% gel, 0.6% D-60, 1/4#/sk Floseal

Completion Schematic,
to Accompany Application
for Dual Completion

CONSOLIDATED OIL & GAS, INC.

CAIN No. 1-E

Section 25, T31N, R13W

San Juan County, New Mexico

December 4, 1980

1-1/2", 2.4#, CW-55, 10 rd. EUE tubing
suspended @ 6110', 188 jt.



Gallup perfs: 6105'-6 39', 18 holes,
0.32" diameter

Basin Dakota perfs: 6764'-6839', 13 holes,
6913'-6977', 10 holes, 0.32" diameter

PBTD @ 7049'

TOTAL DEPTH 7125'

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other ☐

2. NAME OF OPERATOR
Consolidated Oil & Gas, Inc.

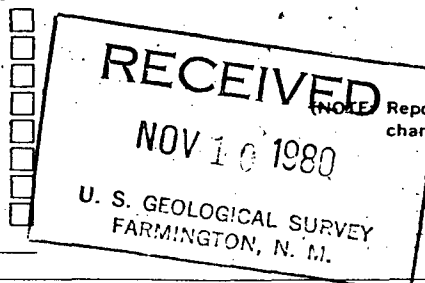
3. ADDRESS OF OPERATOR
P. O. Box 2038 Farmington, NM 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1450' FSL & 1105' FEL
AT TOP PROD. INTERVAL: Same
AT TOTAL DEPTH: Same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:
TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☒
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) ☐

SUBSEQUENT REPORT OF:



5. LEASE
SF 078464

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
(Cain)

9. WELL NO.
(1-1)

10. FIELD OR WILDCAT NAME
Gallup

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 25, T31N, R13W

12. COUNTY OR PARISH
San Juan

13. STATE
NM

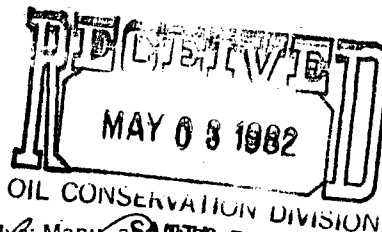
14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5968 GR

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.)*

10-25-80 Perf. at 6105, 07, 09, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39.

10-26-80 Acidize with 500 gal. 7½% NE HCL.

10-29-80 Frac. with 19,110 gal 30# gel & 6,600 # 10-20 sand.
Max. pressure 3800. Average pressure 3200, AIR 15 BPM.Subsurface Safety Valve: Manual ☒ Self ☐ FE

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

SIGNED [Signature] TITLE Drilling Supt. DATE 11/5/80

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____ DATE _____

*See Instructions on Reverse Side

OPERATOR

NOV 14 1980

BY [Signature]

FARMINGTON DISTRICT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on
reverse side)Form approved
Budget Bureau No. 42-R555.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐		5. LEASE DESIGNATION AND SERIAL NO. SF 078464	
1b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR CONSOLIDATED OIL & GAS, INC.		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR PO BOX 2038, FARMINGTON, NEW MEXICO 87401		8. FARM OR LEASE NAME (CAIN)	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 1450' FSL & 1195' FEL Sec 25 T31N R13W At top prod. interval reported below 105' At total depth DEC 1980		9. WELL NO. (125M) (E)	
14. PERMIT NO.		DATE ISSUED	
15. DATE SPUDDED 5-18-80		16. DATE T.D. REACHED 5-31-80	
17. DATE COMPL. (Ready to prod.) 11-10-80		18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 5980 RKB	
19. ELEV. CASINGHEAD 5968		20. TOTAL DEPTH, MD & TVD 7125	
21. PLUG, BACK T.D., MD & TVD 7049		22. IF MULTIPLE COMPL. HOW MANY? 2	
23. INTERVALS DRILLED BY ROTARY TOOLS ☒ CABLE TOOLS ☐		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6764 - 6977 DK	
25. WAS DIRECTIONAL SURVEY MADE? NO		26. TYPE ELECTRIC AND OTHER LOGS RUN IES & CNL	
27. WAS WELL CORED? NO		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number) 6764 to 6977 23 - .32 Holes		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) 6913 - 6977 6764 - 6839 AMOUNT AND KIND OF MATERIAL USED 500 gal acid, 49,000 gal x-lim gel, 35,000# sand 500 gal acid, 52,000 gal x-lim gel, 55,000# sand	
33. PRODUCTION DATE FIRST PRODUCTION 11-10-80 DATE OF TEST 11-10-80 HOURS TESTED 3 CHOKES SIZE 3/4 PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. 155 WATER—BBL. OIL GRAVITY-API (CORR.) 1237		34. DISPOSITION OF GAS (Sold, used, vented, etc.) VENTED MAY 03 1982	
35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing information is complete and correct as determined from all available records SIGNED <i>Veryl</i> TITLE PRODUCTION SUPT. DATE 12-3-80	

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

FARMINGTON DISTRICT

OPERATOR

BY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐		5. LEASE DESIGNATION AND SERIAL NO. SF 078464	
1b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESEV. ☐ Other ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR CONSOLIDATED OIL & GAS, INC.		7. UNIT AGREEMENT NAME	
8. ADDRESS OF OPERATOR PO BOX 2038, FARMINGTON, NEW MEXICO 87401		8. FARM OR LEASE NAME CAIN	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1450' FSL & 1195' FEL SEC 25 T31N R13W At top prod. interval reported below 1105' At total depth DEC 5 1980		9. WELL NO. 1 E/A	
14. PERMIT NO. FARMINGTON, N.M.		10. FIELD AND POOL, OR WILDCAT GALLUP	
DATE ISSUED		11. SEC., T., R. N., OR BLOCK AND SURVEY OR AREA SEC 25 T31N R13W	
15. DATE SPUDDED 5-18--80		12. COUNTY OR PARISH SAN JUAN	
16. DATE T.D. REACHED 5-31-80		13. STATE NEW MEXICO	
17. DATE COMPL. (Ready to prod.) 11-17-80		18. ELEVATIONS (DF, BKB, RT, GR, ETC.) 5980' RKB	
19. ELEV. CASINGHEAD 5968		20. TOTAL DEPTH, MD & TVD 7125	
21. PLUG, BACK T.D., MD & TVD 7049		22. IF MULTIPLE COMPL., HOW MANY? 2	
23. INTERVALS DRILLED BY ROTARY TOOLS ☒ CABLE TOOLS ☐		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6105 to 6139 GL	
25. WAS DIRECTIONAL SURVEY MADE NO		26. TYPE ELECTRIC AND OTHER LOGS RUN IES & CNL	
27. WAS WELL CORED NO		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number) 6105 to 6139 GL 18 - .40 Holes		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) 6105 - 6139 AMOUNT AND KIND OF MATERIAL USED 500 gal acid, 19,110 gal gel 6600# sand & s	
33.* PRODUCTION DATE FIRST PRODUCTION 11-17-80 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) FLOW DATE OF TEST 11-17-80 HOURS TESTED 3 CHOKER SIZE 1 1/2 PROD'N FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO TSM FLOW, TUBING PRESS. 0 CASING PRESSURE 203 CALCULATED 24-HOUR RATE OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (CORR.) TSM		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) VENTED OIL CONSERVATION DIVISION SANTA FE TEST WITNESSED BY TEFTELLER 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 <u>Verg Moore</u> TITLE <u>PRODUCTION SUPT.</u> DATE <u>12-3-80</u>		37. RECEIVED FOR RECORD FARMINGTON DISTRICT BY <u>2</u>	

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

OPERATOR

CAIN 1-E
Sec. 25, T31N, R13W

March 5, 1982

RE: Rule 303, Section C, Paragraph 2, Requirement (f)

Along with current measured bottom hole pressures, we are submitting pressure surveys, AOF's and average production for the Cain 1-E, Sec. 25, T31N, R13W; Payne 1-E, P - Sec. 25, T31N, R13W and Templeton 1-E, B - Sec. 27, T31N, R13W. These wells show the inherently different bottom hole pressures and production we are experiencing on these offset Gallup/Dakota duals.

Page 1 of 1
File

File _____

~~LaKola SAT in 2/20/82~~

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
 Midland, Texas

Page _____ of _____
 File _____

INDIVIDUAL WELL DATA SHEET

Company CONSOLIDATED Oil & Gas Inc Lease CAIN Well No. 1-E

Field GALLUP County SAN JUAN State N.M.

Formation GALLUP Test Date 3/1/82

Elevation _____ Feet	Casing Pressure <u>772</u> PSIG
Datum _____ Feet Subsea	Tubing Pressure <u>597</u> PSIG
Total Depth _____ Feet	Oil Level <u>3376</u> Feet
Perforations <u>6039-6105</u> Feet	Water Level <u>None</u> Feet
Tubing Size <u>1 1/2</u> Inches to <u>6110</u> Feet	Temperature <u>176°</u> OF at <u>6050</u> Feet
Casing Size _____ Inches to _____ Feet	Atmospheric Temperature _____
Packer _____ Feet	Amerada Element Number <u>42243</u>
Bottom Hole Choke _____ Feet	Element Range <u>0-4000</u>
Maximum Safe Test Depth _____ Feet	Operator <u>Rick</u> Unit No. <u>P-20</u> CK-1
Other: _____	

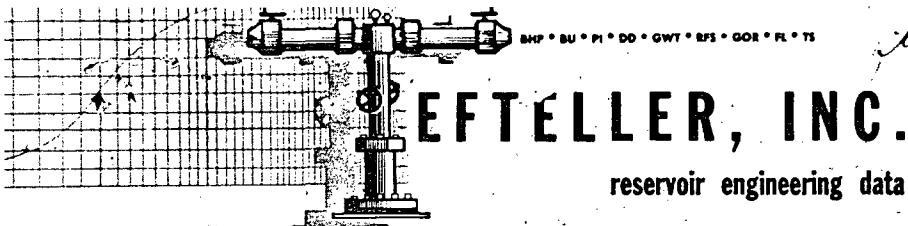
Well Status SHUT IN Never Produced

TIME	DEPTH FEET	DEFL. INCHES	TEMP. °F	DEFL. CORR. LBS/INCH	PRESSURE PSIG	CORR. PRESSURE PSIG	DIFF. PSI	DIFF. FEET	GRADIENT PSI PER FOOT
10:02	0	294				598			
10:11	2000	309				628	30	2000	0.015
10:18	4000	420				854	226	2000	0.113
10:24	5450	654.5				1331	477	1450	0.329
10:28	5750	703				1428	97	300	0.323
10:32	6050	750				1525	97	300	0.323
	6072	MP				1532	7	22	0.323
$\begin{array}{r} 0.329 \times 2000 = 658 \\ 0.015 \times 2000 = 30 \\ \hline 0.314 \times 2000 = 628 \\ \hline 0.314 \times 2000 = 628 \\ \hline 3376 \end{array}$ $\begin{array}{r} 658 \\ - 226 \\ \hline 432 \end{array}$									

Pressure: _____ PSIG at Subsurface Datum Depth: _____ Feet

Last Test Date: _____ Last Pressure: _____ @ _____ Feet/Change: _____ PSIG

REMARKS: Dakota shut 2/20/82 Gallup's Never Produced



MIDLAND, TEXAS / FARMINGTON, NEW MEXICO

P. O. Box 5247

Midland, Texas 79701

February 26, 1981

Consolidated Oil & Gas, Inc.
Box 2038
Farmington, New Mexico 87401

Attn: Mr. Veryl Moore

Subject: Bottom Hole Pressure Measurement
Cain No. 1-~~E~~
San Juan County, New Mexico
Our File No. 2-11399-P

Gentlemen:

Attached hereto are the results of a bottom hole pressure measurement which was made on the above captioned well February 12, 1981.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.

Neil Tefteller

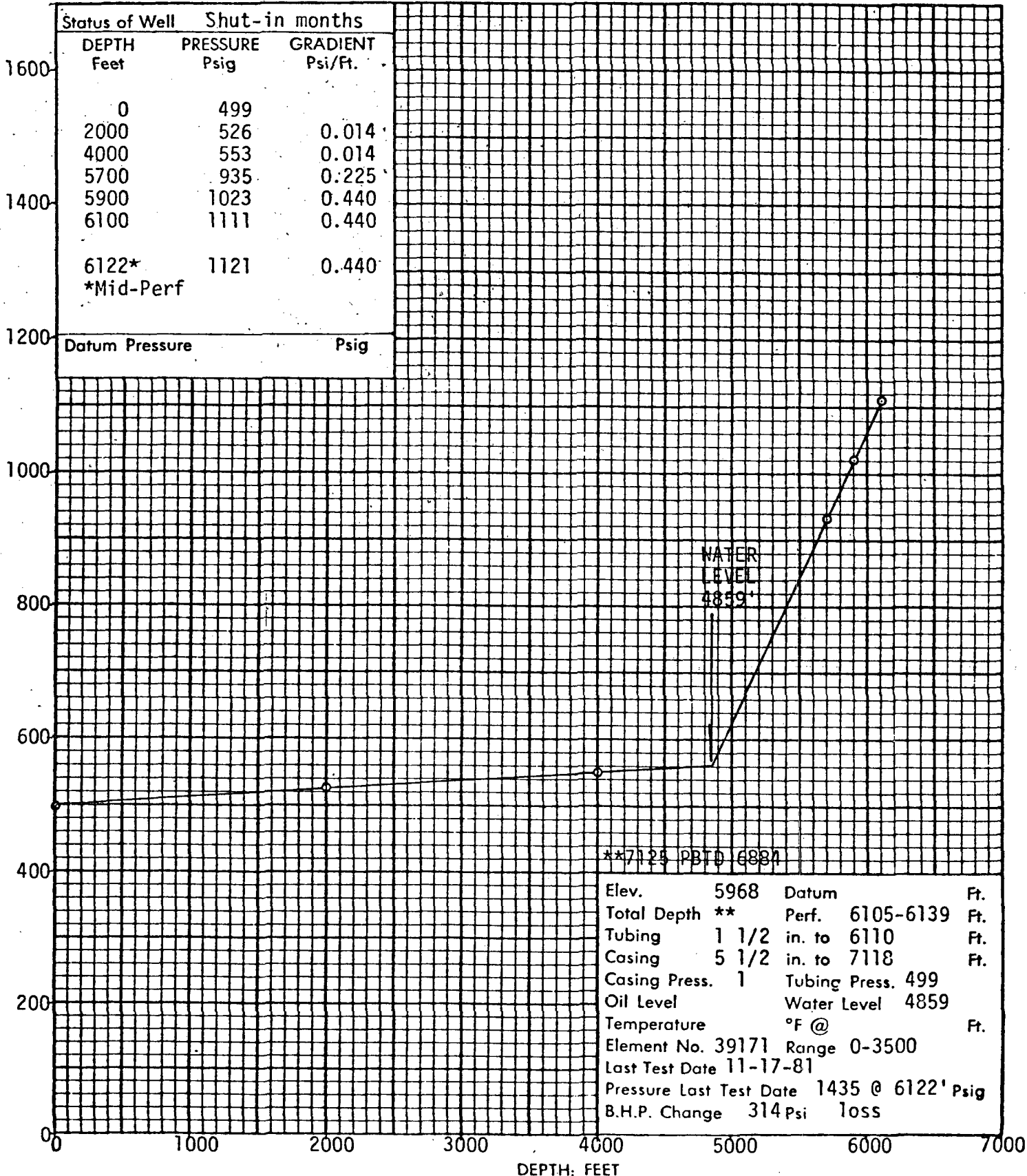
NT/lw



Page 1 of 1
File 2-11399-P

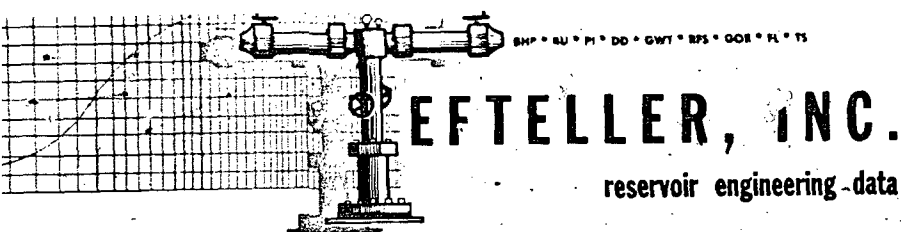
Company CONSOLIDATED OIL & GAS, INC. Lease CAIN Well No. 1-15
Field _____ County SAN JUAN State NEW MEXICO
Formation GALLUP Test Date FEBRUARY 12, 1981

Status of Well	Shut-in months	
DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
0	499	
2000	526	0.014
4000	553	0.014
5700	935	0.225
5900	1023	0.440
6100	1111	0.440
6122*	1121	0.440
*Mid-Perf		
Datum Pressure		Psig



**7125 PBD 6884

Elev. 5968 Datum _____ Ft.
Total Depth ** Perf. 6105-6139 Ft.
Tubing 1 1/2 in. to 6110 Ft.
Casing 5 1/2 in. to 7118 Ft.
Casing Press. 1 Tubing Press. 499
Oil Level _____ Water Level 4859
Temperature _____ °F @ _____ Ft.
Element No. 39171 Range 0-3500
Last Test Date 11-17-81
Pressure Last Test Date 1435 @ 6122' Psig
B.H.P. Change 314 Psi loss



MIDLAND, TEXAS / FARMINGTON, NEW MEXICO

P. O. Box 5247

Midland, Texas 79701

December 12, 1980

Consolidated Oil & Gas, Inc.
Box 2038
Farmington, New Mexico 87401

Attn: Mr. Veryl Moore

Subject: Bottom Hole Pressures and Absolute
Open Flow Potential Measurements
Cain No. 1-~~E~~
Dakota and Gallup Formations
Basin Dakota Field
San Juan County, New Mexico
Our File No. 2-11226-P&AOF

Gentlemen:

Attached hereto are the results of bottom hole pressures and absolute open flow potential measurements which were made on the above captioned well November 10 thru November 17, 1980.

The data presented are in tabular and graphical form. The New Mexico Oil Conservation Commission Form C-122 is attached.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.

Neil Tefteller

NT/lw

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : CAIN NO. 1-M

Page 1 of 5

Field : BASIN DAKOTA

File 2-11226-P&AOF

Form: DAKOTA

CHRONOLOGICAL PRODUCTION DATA

1980 Date	Status of Well	Time	Elapsed Time		Daily Rate Gas MCF/D	Wellhead Pressure	
			Hrs.	Min.		Gallup	Dakota
11-10	Arrived on location						
"	shut-in	09:00					
"	Gradient Traverse					34	1182
"	Inst. @ 6760'	10:00					
"	Open well, 2" X 3/4"	10:35				34	1182
"	Flowing	10:50	0	15	2439.0	35	164
"	"	11:05	0	30	1975.9	37	131
"	"	11:20	0	45	1962.1	37	130
"	"	11:35	1	00	1835.9	38	121
"	"	12:05	1	30	1570.5	38	102
"	"	12:35	2	00	1445.1	41	93
"	"	13:35	3	00	1237.4	46	78

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-10-80	
Company Consolidated Oil & Gas, Inc.				Connection None			
Pool Basin Dakota				Formation Dakota		Unit	
Completion Date		Total Depth 7125		Plug Back TD 6884		Elevation 5968	
Farm or Lease Name Cain		Well No. 1-M		Perforations: From 6764 To 6839		Set At 7118	
Csg. Size 5 1/2		Wt. 15 1/2		Perforations: From To		Set At 6780	
Thq. Size 1 1/2		Wt. 2.9		Perforations: From To		Set At 6780	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas Dual Completion				Packer Set At 6250		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a New Mexico	
L		H		G _a		% CO ₂	
						% N ₂	
						% H ₂ S	
						Prover Pos. Ck.	
						Meter Run	
						Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI				1182			1182	60	Pkr.		3 hours
1.	2" X 3/4"			78			78	60			
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	11.00		90	1.000	1.240	1.008	1237.4
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ XXXXXXXXXX
3.					Specific Gravity Flowing Fluid _____ XXXXX
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 1194		P _c ² 1425.6	
NO.	P _i ²	P _w ²	P _e ²
1	8100	272.9	1425.6
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_e^2 - P_w^2} = 1.0326$ (2) $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1.0243$

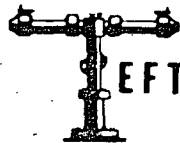
AOF = Q $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1267.5$

MAY 08 1982

OIL CONSERVATION DIVISION

SANTA FE

Absolute Open Flow _____ Mcfd @ 15.025	Angle of Slope @ _____	Slope, n _____ .75
Remarks: _____		
Approved By Commission:	Conducted By:	Calculated By:
		Checked By:



EFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS

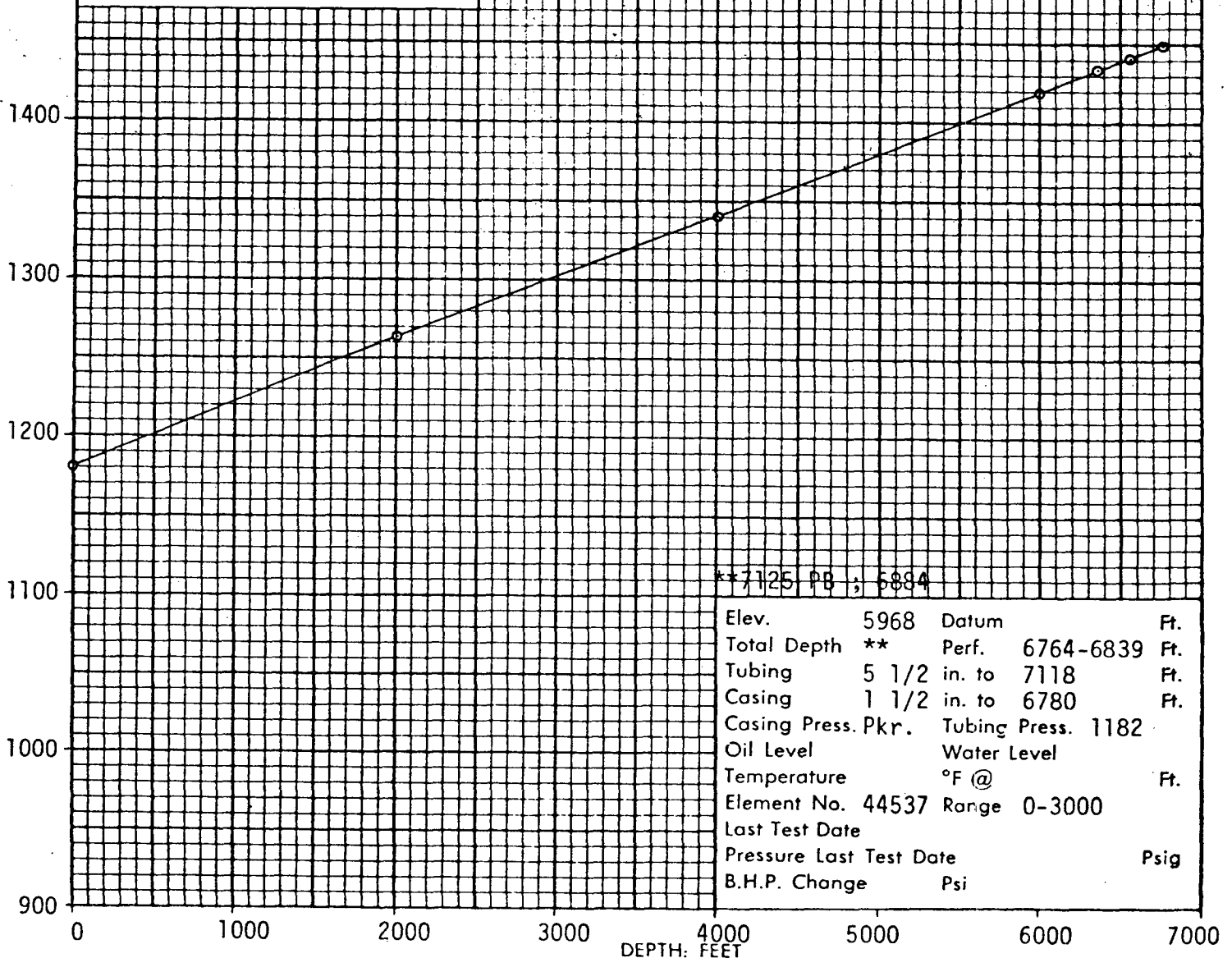
Page 3 of 5
File 2-11226-P&AOF

Company CONSOLIDATED OIL & GAS, INC. Lease CAIN Well No. 1-M
Field BASIN DAKOTA County SAN JUAN State NEW MEXICO
Formation DAKOTA Test Date NOVEMBER 10, 1980

Status of Well	Shut-in 7 days	
DEPTH Feet	PRESSURE Psig	GRADIENT, Psi/Ft.
0	1181	
2000	1263	0.041
4000	1341	0.039
6000	1419	0.039
6360	1433	0.039
6560	1441	0.040
6760	1449	0.040
6802*	1451	0.040

*Mid-Perf

Datum Pressure Psig



**7125 PB ; 5884

Elev. 5968 Datum Ft.
Total Depth ** Perf. 6764-6839 Ft.
Tubing 5 1/2 in. to 7118 Ft.
Casing 1 1/2 in. to 6780 Ft.
Casing Press. Pkr. Tubing Press. 1182
Oil Level Water Level
Temperature °F @ Ft.
Element No. 44537 Range 0-3000
Last Test Date
Pressure Last Test Date Psig
B.H.P. Change Psi

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : CAIN NO. 1-M

Page 4 of 5

Field : BASIN

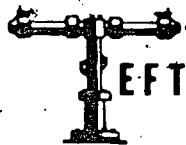
File 2-11226-P&AOF

Form: GALLUP

CHRONOLOGICAL PRODUCTION DATA

1980 Date	Status of Well	Time	Elapsed Time		Daily Rate Gas MCF/D	Wellhead Pressure		
			Hrs.	Min.		Mesa Verde Tbg.	Dakota Csg.	Tubing
11-17	Arrived on location							
"	Well shut in		7	days				
"	Ran gradient traverse				*	15	219	1162
"	Open well on 3/4" choke	10:55	0	00		15	219	1162
"	"	11:00	0	15		0	219	1171
"	"	11:25	0	30		0	219	1171
"	"	11:40	0	45		0	203	1171
"	"	11:55	1	00		0	203	1171
"	"	12:25	1	30		0	203	1171
"	"	12:55	2	00		0	203	1171
"	"	13:25	2	30		0	203	1171
"	"	13:55	3	00		0	203	1171
"	Shut well in							

*NOTE: No flow for potential test - no indication of packer leaks



EFTTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS

Page 5 of 5
File 2-11226-P&AOF

Company CONSOLIDATED OIL & GAS, INC. Lease CAIN Well No. 1-M
Field BASIN County SAN JUAN State NEW MEXICO
Formation GALLUP Test Date NOVEMBER 17, 1980

Status of Well Shut-in 14 days

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
---------------	------------------	---------------------

0	15	
2000	18	0.002
4000	514	0.248
5700	1251	0.434
5900	1338	0.435
6100	1425	0.435
6122*	1435	0.435

*Mid-Perf

Datum Pressure	Psig
----------------	------

PRESSURE POUNDS PER SQUARE INCH GAUGE

WATER
LEVEL
2861

***May be some oil on top of water
**7125 RB ; 6884

Elev.	5968	Datum	Ft.
Total Depth **		Perf.	6105-6139 Ft.
Tubing	1 1/2 in. to		6110 Ft.
Casing	5 1/2 in. to		7118 Ft.
Casing Press.	219	Tubing Press.	15
Oil Level	None**	Water Level	2861
Temperature	°F @		Ft.
Element No.	44537	Range	0-3000
Last Test Date			
Pressure Last Test Date			Psig
B.H.P. Change		Psi	

DEPTH: FEET

CONSOLIDATED OIL & GAS, INC.

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN 8 A.M. 12 1955
END 8 A.M. 12 1955

LEASE 1-1111 WELL NOS. 1-1111

GAS

ENTER DATE →	25	26	27	28	29	30	31	TOTALS THIS REPORT ↓
	M	T	W	T	F	S	S	
ENTER DAY OF WK →								
CHOKES	5.2							
TP / CP	73							
ORIFICE SIZE	5/8							
STATIC	0	8.3	7.3	8.2	9.7	8.9	8.5	
DIFF.		2.4	3.2	2.7	2.5	2.4	2.5	
COEFFICIENT	5.15							
HRS. OPERATED		22	24	21	21	21	21	140
MCF / D		120	125	125	110	110	110	710
CHOKES								
TP / CP								
ORIFICE SIZE								
STATIC								
DIFF.								
COEFFICIENT								
HRS. OPERATED								
MCF / D								

CONDENSATE

SIZE	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.
700	7	10													8	0		
PROD.	FT.	IN.																
BBL.																		

786

RUNS													
TANK NO.	DATE	TICKET NO.	OPEN		CLOSE		% BS & W	DEG. TEMP	UNCOR. GRAV.	COR. GRAV.	UNCOR. BBLs	COR. BARRELS	
			FT.	IN.	FT.	IN.							
1										8-13	0	01.	
1										4/11	492		

COMPRESSOR

#	SUC.	DISC.	HOURS	#	SUC.	DISC.	HOURS	MCF
	220	230	220		220	250	225	
	16	18	18		170	180	180	

INTERMITTER

ZONE																		
ZONE																		

PUMPER M.P. at
APPROVED [Signature]

CONSOLIDATED OIL & GAS, INC.

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN 8 A.M. 13 19 62
END 8 A.M. 13 19 62

LEASE 1 WELL NOS. 1-1

GAS

Operations - Previous 24 Hours

ZONE:

ZONE:

ENTER DATE	17	18	19	20	21	22	23	24
ENTER DAY OF WK	T	M	T	W	T	F	S	S
CHOKE	S.I. 8.0	6.0		COMP	S.I. 8.0			
TP / CP		182	145	0000	450	550	640	
ORIFICE SIZE	5/8							
STATIC			83	8.6				
DIFF.	0	0	40	3.0	0	0	0	
COEFFICIENT	5.15							
HRS. OPERATED			17	18		0		
MCF / D	0	0	120	100	0	0	0	
CHOKE								
TP / CP								
ORIFICE SIZE								
STATIC								
DIFF.								
COEFFICIENT								
HRS. OPERATED								
MCF / D								

TOTALS
THIS
REPORT



345

30

CONDENSATE

SIZE	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.
300	7	10															7	10
PROD.	FT.	IN.																
	BBL.																	

1775

0

RUNS

TANK NO.	DATE	TICKET NO.	OPEN	CLOSE	%	DEG.	UNCOR.	COR.	UNCOR.	COR.
			FT.	IN.	FT.	IN.	BS & W	TEMP	GRAV.	GRAV.

COMPRESSOR

#	SUC.			240	COMP					
	DISC.			300	DISC					
	HOURS			18	HRS					
#	SUC.			170						
	DISC.			45						
	HOURS			17	18					

MCF

MCF

INTERMITTER

ZONE			1400							
ZONE			400							

PUMPER

APPROVED

Page _____ of _____
File _____

File

Well Status SHUT IN 10 days

TIME	DEPTH FEET	DEFL. INCHES	TEMP. °F	DEFL. CORR. LBS./INCH	PRESSURE PSIG	CORR. PRESSURE PSIG	DIFF. PSI	DIFF. FEET	GRADIENT PSI PER FOOT
11:45	0	394				801			
11:53	2000	416				846	45	2000	0.023
12:00	4000	440				895	49	2000	0.025
12:07	6000	464				943	48	2000	0.024
12:11	6300	468				952	9	300	0.030
12:16	6600	490				996	44	300	0.147
	6774	MP				1048	52	174	0.300
		.300 X 300 = 90							
		1.030 6300							
		1.270 170							
		1.6470							

Dakota Shot in 2/19/42

INDIVIDUAL WELL DATA SHEET

Company CONSOLIDATED OIL & GAS INC. Lease PAUNE Well No. 1-E

Formation GALLUO

Test Date 3-1-82

Casing Pressure 740

Tubing Pressure 731

Oil Level 770178

Water Level 97.677 e

Temperature 174 °F at 6,000'

Atmospheric Temperature

Amerada Element Number 42343

Element	Range
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Operator: Rick Unit No. P-20 skid

Well Status

SHUT IN 9 ~~DAYS~~
~~hrs.~~

Pressure: _____ Psig at Subsurface Datum Depth: _____ Feet

Last Test Date: Last Pressure: @: Feet/Change: Ps

REMARKS: hr 5252

Shut in Gallup 2/20/82

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form G-122
Revised 1-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1/15/81	
Company Consolidated Oil & Gas			Connection Southern Union Gathering		
Well Gallup			Unit		
Completion Date 1/8/81		Total Depth 6939'	Plug Back TD 6208'	Elevation 3975'	Form or Lease Name Payne
Gas Rate 5.5	Oil 25.5	Water 4.150	Est. AI 6938	Perforations From 6012' To 6117'	Well No. 1-E
Gas Rate 1.5	Oil 2.9	Water 1.610	Est. AI 6064'	Perforations From To	Well No. P 35 31N 17W
Type Well - Single - Graduated - G.G. or G.C. Multiple G.G. Dual				Perfor. Set At 6208'	County San Juan
Producing Zone TEG		Reference Temp. °F = 104°	Average Annual Temp. °F	Bottom Pressure - lb 12	State New Mexico
L	H	Gg 0.670	% CO ₂	% H ₂	% H ₂ S
FLOW DATA			TUBING DATA		CASING DATA
NO.	Flow Line Size	Orifice Size	Press. p.s.i.g.	Diff. In. H ₂ O	Temp. °F
1	Choke	0.750	40		64
2					
3					
4					
5					
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg
1	12.365		52	0.9962	0.9463
2					
3					
4					
5					
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio
1					Wt. Fract.
2					A.P.G. Gravity of Liquid Hydrocarbon
3					A.P.G. Gravity Separator Gas
4					Specific Gravity Flowing Field
5					Critical Pressure
					Critical Temperature
$F_c = 952 \quad F_c^2 = 925444$ $(1) \frac{F_c^2}{F_c^2 - P_w^2} = 1.1176 \quad (2) \left[\frac{F_c^2}{F_c^2 - P_w^2} \right]^n = 1.0859$ $A W = 0 \quad \left[\frac{F_c^2}{F_c^2 - P_w^2} \right]^n = 662$					
Absolute Open Flow 662 MISC 15.075 Angle of Flow 0.75					
Remarks					
Approved By Connections		Conducted By: Wilson Service Co		Checked By: Wilson Service Co.	

TEMPERATURE ☆

Wilson Service Co.

☆ SURVEYS ☆ ☆

P. O. BOX 1619 • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 327-2575

Pressure Survey

COMPANY... Consolidated Oil & Gas LEASE... Payne WELL... 1-E
FIELD... Basin Dakota LOCATION... Unit P Sec 35 Twp 31N Rge 13W
COUNTY... San Juan STATE... New Mexico DATE... 1/15/81
SHUT-IN... 1/15/81 ELEVATION... 5975' DATUM...
ZERO POINT... TBG. PRESSURE... 950 CASING PRESSURE... 940
TEG. DEPTH... 6064' CASING SET... 6938' P.B.T.D. ... 6208'
PACKER SET... 6208' CASING PERF. 6012' - 6117' MAX. TEMP. ... 64°
FLUID LEVEL...

Bl zone

DEPTH

Lube
1000
3000
5000
5500
5750
6000

PRESSURE

949
957
1006
1065
1079
1089
1100

GRADIENT

.000
.008
.02
.02
.02
.04
.04

NEW MEXICO OIL CONSERVATION COMMISSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form O-11
Rev. 1-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Date 1/22/81	
Company Consolidated Oil & Gas		Connection Southern Union Gathering	
Pool Basin		Formation Dakota	
Completion Date 1/8/81	Total Depth 6939'	Perfor. Base To 6896'	Elevation 5975'
Perfor. Interval From 5.5 To 15.5		Perfor. Interval From 6896' To 6838'	
Perfor. Interval From 1.920 To 2.9		Perfor. Interval From 6692' To 6692'	
Type of Well - Single - Flowhead - G.O. or G.O. Multiple G.O. Dual		Perfor. Set At 6208'	
Perfor. Temp. °F 184°		Perfor. Temp. °F 6600'	
Perfor. Temp. °F 12		Perfor. Temp. °F New Mexico	
Perfor. Temp. °F 0.670		Perfor. Temp. °F San Juan	
Perfor. Temp. °F 12		Perfor. Temp. °F New Mexico	
Perfor. Temp. °F 0.670		Perfor. Temp. °F San Juan	

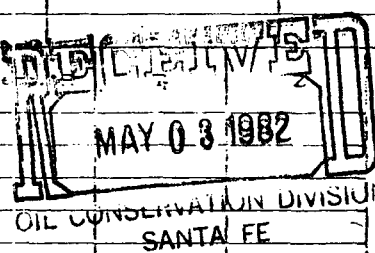
FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Flow Line Size	X	Orifice Size	Press. psia	Diff. In. H ₂ O	Temp. °F	Press. psia	Temp. °F	Press. psia	Temp. °F	
51							1520				14 Days
1.	Choke		0.75	110		92					3 Hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mscf
1.	12.365		122	0.9706	0.9463	1.010	1399
2.							
3.							
4.							
5.							

NO.	1	2	3	4	5
1.	14084	403	162409	2184615	
2.					
3.					
4.					
5.					

NO.	1	2	3	4	5
1.	14084	403	162409	2184615	
2.					
3.					
4.					
5.					

NO.	1	2	3	4	5
1.	14084	403	162409	2184615	
2.					
3.					
4.					
5.					



Remarks: Well Produced a heavy fog of liquids throughout the Test.

Approved By	Conducted By	Calculated By	Checked By
	Wilson Service Co.	Wilson Service Co.	

TEMPERATURE ☆

Wilson Service Co.

☆ SURVEYS ☆ ☆

P. O. BOX 1619 • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 327-2575

Pressure Survey

COMPANY Consolidated Oil & Gas. LEASE Payne WELL 1-E
FIELD Basin Dakota LOCATION Unit P Sec 35 Twp 31N Rge 13W
COUNTY San Juan STATE New Mexico DATE 1/22/81
SHOT-IN 1/22/81 ELEVATION 5975' DATUM
ZERO POINT TBG. PRESSURE 1520 CASING PRESSURE 960
TBG. DEPTH 6692' CASING SET 6938' P.B.T.D. 6896'
PACKER SET 6208' CASING PERF. 6664' - 6838' MAX. TEMP. 92°
FLUID LEVEL

D.K. 312

DEPTH	PRESSURE	GRADIENT
Lube	1542	.00
1000	1600	.05
3000	1707	.05
5000	1809	.05
6000	1858	.05
6600	1941	.13
6900	1996	.18

CONSOLIDATED OIL & GAS, INC.

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN _____ A.M. 19____
END _____ A.M. 19____

LEASE _____ WELL NOS. 1-8

GAS

ENTER DATE →	24	26	27	28	29	30														
ENTER DAY OF WK →	W	T	F	S	S	M														
Operations - Previous 24 Hours ZONE: D	CHOKE	4500 (650)																		
	TP / CP	3.1 BBL				370														
	ORIFICE SIZE	875																		
	STATIC				8.5	8.5	8.5													
	DIFF.	5	0	0	2.2	2.2	2.2													
	COEFFICIENT	10.1																		
	HRS. OPERATED				24	24	24													
	MCF / D		10		180	145	145													
Operations - Previous 24 Hours ZONE: L	CHOKE		Location 5000																	
	TP / CP				3200															
	ORIFICE SIZE	48																		
	STATIC	8.5	8.5	8.5	8.5	8.5	8.5													
	DIFF.	2.5	2.5	0	2.5	3.5														
	COEFFICIENT	10.15																		
	HRS. OPERATED	3	1																	
	MCF / D	15																		

TOTALS
THIS
REPORT

45

3700

1.1

10

CONDENSATE

SIZE	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.		
300	3	0													36					
PROD.	FT.	IN.																		
BBL.																				

0.6

9.96

RUNS

TANK NO.	DATE	TICKET NO.	OPEN		CLOSE		% B S & W	DEG. TEMP	UNCOR. GRAV.	COR. GRAV.	UNCOR. BBL.	COR. BARRELS
			FT.	IN.	FT.	IN.						

COMPRESSOR

H2O	SUC.																			
	DISC.																			
	HOURS																			
OK	SUC.																			
	DISC.																			
	HOURS																			

MCF

MCF

INTERMITTER

ZONE																				
ZONE																				

PUMPER _____

APPROVED _____

S.C. 3 X 7 H2O

CONSOLIDATED OIL & GAS, INC.

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN 8 A.M. 19
END 8 A.M. 11 19

LEASE 1-6 WELL NOS. 1-6

ENTER DATE	17	18	19	20	21	22	23	24
ENTER DAY OF WK	T	T	T	T	F	F	M	T
CHOKED	5005							
TP / CP			375					
ORIFICE SIZE	575							
STATIC	8.8	8.8	8.7	8.5	8.5	8.5	8.5	8.7
DIFF.	2.5	2.5	2.2	2.5	2.5	2.5	2.5	2.7
COEFFICIENT	1.1							
HRS. OPERATED	24	24	24	24	24	24	24	24
MCF / D	220	220	190	215	215	215	215	190

TOTALS
THIS
REPORT

190
1650

CHOKED								
TP / CP			375					
ORIFICE SIZE	512							
STATIC	8.8	8.8	8.7	8.5	8.5	8.5	8.5	8.8
DIFF.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
COEFFICIENT	5.15							
HRS. OPERATED	3		3	3	3	3	3	3
MCF / D	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

210

375/50

24
120

SIZE	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.
200	8	1											10	2			3	0
PROD.	FT.	IN.																
BBL.																		

794

21
41

TANK NO.	DATE	TICKET NO.	OPEN	CLOSE	% BS & W	DEG. TEMP	UNCOR. GRAV.	COR. GRAV.	UNCOR. BBL.	COR. BARRELS
	11-20	2910	10 2	3 0	0.1	43			143	00

SUC.										
DISC.										
HOURS										
SUC.										
DISC.										
HOURS										

MCF

MCF

INTERMITTER	ZONE	
INTERMITTER	ZONE	

PUMPER

APPROVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12/26/80				
Company Consolidated Oil & Gas				Connection Gas Company of New Mexico					
Pool Basin				Formation Gallup				Unit	
Completion Date 12/11/80		Total Depth 6630'		Plug Hook TD 5800'		Elevation 5580'		Farm or Lease Name Templeton	
Csq. Size 5.5	Wt. 15.5	d 4.950	Set At 6630'	Perforations: From 5676' To 5706'			Well No. 1-E		
Tbg. Size 1.90	Wt. 2.9	d 1.610	Set At 5693'	Perforations: From To			Unit Soc. Twp. Rge. B 27 31N 13W		
Type Well - Single - Brodenhead - G.C. or G.O. Multiple G.G. Dual				Packer Set At 5800'		County San Juan			
Producing Thru Tbg		Reservoir Temp. °F P		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							250		750		15 Days
1.	Choke	0.75	0			64					3 Hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		0				0
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	RECEIVED MAY 03 1982	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.					Specific Gravity Separator Gas _____ X X X X X X X X	
3.					Specific Gravity Flowing Fluid _____ X X X X X	
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.	
5.				Critical Temperature _____ R _____ R		

P _c _____				(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ _____ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ _____	
NO.	P _i ²	P _w	P _c ² - P _w ²	AOF = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0$	
1					
2					
3					
4					
5					

Absolute Open Flow _____ Mcfd @ 15.025		Angle of Slope @ _____	Slope, n 0.75
Remarks: Too Small To Measure.			

Approved By Division	Conducted By: Wilson Service Co.	Calculated By: Wilson Service Co.	Checked By:
----------------------	-------------------------------------	--------------------------------------	-------------

TEMPERATURE ☆

Wilson Service Co.

☆ SURVEYS ☆ ☆

P. O. BOX 1619 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 327-2575

Pressure Survey

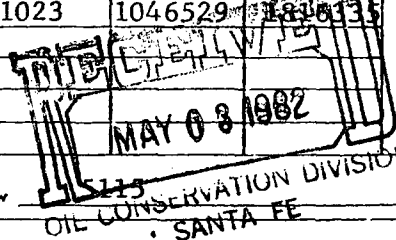
COMPANY Consolidated Oil & Gas LEASE Templeton WELL 1-E
FIELD LOCATION Unit B. Sec-27 Twp-31N Rge-13W
COUNTY San Juan STATE New Mexico DATE 12/26/80
SHUT-IN 12/26/80 ELEVATION 5580' DATUM
ZERO POINT TBG. PRESSURE 250 CASING PRESSURE 750
TBG. DEPTH CASING SET 6630' P.B.T.D. 5800'
PACKER SET 5800' CASING PERF. 5676' to 5706' MAX. TEMP. 64°
FLUID LEVEL 2550'

DEPTH	PRESSURE	GRADIENT
Lube	256	.000
1000	337	.081
3000	429	.046
5000	1494	.532
5250	1602	.432
5500	1707	.420
5650	1768	.406

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12/18/80	
Company Consolidated Oil & Gas			Connection Gas Co of New Mexico			
Pool Basin			Formation Dakota		Unit	
Completion Date 12/11/80		Total Depth 6630'		Plug Back TD 6600'		Elevation 5580' GL
Csg. Size 5.500		WI. 15.5		Set At 6630		Perforations: From 6314 To 6563
Csg. Size 1.900		WI. 2.90		Set At 6322		Perforations: From To
Type Well - Single - Broadhead - G.G. or G.O. Multiple G.G. Dual					Packer Set At 5800	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12
L		H		G _g 0.670		% CO ₂ % N ₂ % H ₂ S
				Prover Choke		Meter Run Taps
FLOW DATA				TUBING DATA		CASING DATA
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F
1.	Choke		0.750	300		93
2.						
3.						
4.						
5.						
RATE OF FLOW CALCULATIONS						
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}
1	12.365		312	0.9697	0.9463	1.027
2.						
3.						
4.						
5.						
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.					Specific Gravity Separator Gas _____ X X X X X X X X	
3.					Specific Gravity Flowing Fluid _____ X X X X X	
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.	
5.					Critical Temperature _____ R _____ R	
P _c 1692 P _c ² 2862864 NO F _t ² P _w P _w ² P _c ² - P _w ² (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5762$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4067$						
1	97344	1023	1046529	1836135	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5115$	
2						
3						
4						
5						
Absolute Open Flow _____ Mcf @ 15.025				Angle of Slope @ _____		Slope, n 0.75
Remarks:						
Approved By Commission:		Conducted By: Wilson Service Co.		Calculated By: Wilson Services		Checked By:



TEMPERATURE ☆

Wilson Service Co.

☆ SURVEYS ☆ ☆

P. O. BOX 1619 • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 327-2575

Pressure Survey

WY... Consolidated Oil & Gas LEASE... Templeton... WELL... 1-E
D... Dakota... LOCATION... Unit B Sec 27 Twp 31 Rge 13
TY... San Juan... STATE... New Mexico... DATE... 12/18/80
-IN... 12/18/80... ELEVATION... 5580 GL... DATUM...
POINT... TBG. PRESSURE... 1680... CASING PRESSURE... 725
DEPTH... 6322'... CASING SET... 6630'... P.B.T.D. ... 6600'
R SET... 5800'... CASING PERF. ... 6314 - 6563... MAX. TEMP. ... 93°
LEVEL... 0

PTH

PRESSURE

GRADIENT

1685	.00
1752	.06
1876	.06
1993	.06
2022	.06
2050	.06
2062	.06
2074	.06

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN A.M. 19

END A.M. 19

LEASE 10/1/75 WELL NOS. 10/1/75

GAS		ENTER DATE →		ENTER DAY OF WK →		27		28		29		30		31		TOTALS THIS REPORT			
		Operations - Previous 24 Hours		Zone:		Zone:		Zone:		Zone:		Zone:		Zone:		↓			
CONDENSATE	K	CHOKE															360		
		TP / CP																	
		ORIFICE SIZE	5.16																
		STATIC	8.1		8.1		8.1		8.1		8.1		8.1						
		DIFF.	2.8		2.8		2.8		2.8		2.8		2.8						
		COEFFICIENT	1.2																
	L	HRS. OPERATED	30		20		20		20		20		17				11 7		
		MCF / D	214		250		250		250		250		210						
		CHOKE	1001		SHUT		in C		motor repair										
		TP / CP																	
		ORIFICE SIZE	1.125																
		STATIC	0		0		0		0		0		0						
K	DIFF.	0		0		0		0		0		0				240			
	COEFFICIENT	16.8																	
	HRS. OPERATED	0		0		0		0		0		0							
	MCF / D	0		0		0		0		0		0							
	CHOKE																		
	TP / CP																		
COMPRESSOR	K	SIZE	FT.	IN.	FL	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	
		PROD.	FT.	IN.															
		BBL.																	
		RUNS																	
		TANK NO.	DATE	TICKET NO.	OPEN FT.	OPEN IN.	CLOSE FT.	CLOSE IN.	% B.S. & W.	DEG. TEMP.	UNCOR. GRAV.	COR. GRAV.	UNCOR. BBL.	COR. BARRELS					
	L	SUC.	11:00																
		DISC.	10:25																
		HOURS	7 3/4	8 1/4	8 1/4	7 3/4	7 3/4	7 1/4											
		SUC.																	
		DISC.																	
		HOURS																	
INTERMITTER	ZONE	3.4 X 1 1/2"																	
	ZONE	1.4 X 5 1/2"																	

CONSOLIDATED OIL & GAS, INC.

EIGHT DAY REPORT OF DAILY GAUGES

BEGIN 7 A.M. 11 17 19 81
END 7 A.M. 11 24 19 81

LEASE 1 WELL NOS. 1 E

GAS

ENTER DATE →		17	18	19	20	21	22	23	24	TOTALS THIS REPORT ↓
ENTER DAY OF WK →		T	U	T	F	S	S	M	T	
Operations - Previous 24 Hours	ZONE:	CHOKE	← ST	← 5000						
		TP / CP		Repair	30					
		ORIFICE SIZE	8.6		4.8	8.4	8.3	8.3	8.5	
		STATIC	10.0		6.7	4.5	2.0	2.7	2.7	
		DIFF.	0	0						
		COEFFICIENT	13.2							
		HRS. OPERATED	0		7	20	20	20	20	
		MCF / D	0	0	20	410	770	245	245	
		CHOKE	← ST	← 5000	← 5000	← 5000	← 5000	← 5000	← 5000	
		TP / CP								
Operations - Previous 24 Hours	ZONE:	ORIFICE SIZE	11.25							180
		STATIC	10.0		4.1	0	8.5	0	0	
		DIFF.	0	0	0	0	0	0	0	
		COEFFICIENT	16.8							
		HRS. OPERATED	0	0	0	4	0	0	0	4
		MCF / D	0	0	0	120	0	0	0	120

CONDENSATE

SIZE	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.
300	3	0															3	7
PROD.	FT.	IN.															2	7
	BRLS.																11	62

72

RUNS													
TANK NO.	DATE	TICKET NO.	OPEN		CLOSE		% B S & W	DEG. TEMP	UNCOR. GRAV.	COR. GRAV.	UNCOR. BBLs		COR. BARRELS
			FT.	IN.	FT.	IN.							

COMPRESSOR

D	SUC.																	
	DISC.																	
	HOURS																	
G	SUC.																	
	DISC.																	
	HOURS																	

INTERMITTER

ZONE																		
ZONE																		

PUMPER KD
APPROVED [Signature]

CAIN 1-E
Sec. 25, T31N, R13W

March 4, 1982

Dakota oil:
Sg 60.2 BS&W 0.01

Gallup oil:
Sg 62,1 BS&W 0.02

A laboratory water analysis for the Basin Dakota is attached.

The Gallup makes no water.

DIVISION LABORATORY

FARMINGTON, NEW MEXICO

LABORATORY WATER ANALYSIS

Report No: _____

Date: 2/16/82To: Consolidated Oil And GasP.O. Box 2038Farmington NM 87401Attn: Barney Jones

This report is the property of National Cementers Corp. and neither it nor any part thereof is to be published or disclosed without first securing the express approval of laboratory management; it may, however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from National Cementers Corporation.

Submitted By: Barney JonesDate Received: February 4, 1982Well No: Cain IEDepth: 7125Formation: DakotaLocation: Sec 25, T31N, R13W

Resistivity	<u>0.25</u>	ohms/m ² /m
Temperature	<u>74°F</u>	
Specific Gravity(Sp.Gr.)	<u>1.019</u>	
pH	<u>7.7</u>	
Total Dissolved Solids	<u>29,155</u>	parts per million*
Calcium (Ca ⁺⁺)	<u>369</u>	parts per million
Magnesium (Mg ⁺⁺)	<u>46</u>	parts per million
Chlorides (Cl ⁻)	<u>9,950</u>	parts per million
Carbonates (CO ₃ ⁻⁻)	<u>0</u>	parts per million
Bicarbonates (HCO ₃ ⁻)	<u>1,684</u>	parts per million
Sulfates (SO ₄ ⁻⁻)	<u>7,124</u>	parts per million
Iron (Fe ⁺⁺⁺)	<u>present</u>	parts per million
Potassium (K ⁺)	<u>NIL</u>	parts per million
Sodium (Na ⁺)(Difference)	<u>9,982</u>	parts per million
Stability Index (SI)	<u>Not required</u>	

REMARKS: _____

* indicates parts per million by weight; uncorrected for Specific Gravity

LABORATORY ANALYST:

Clarion CochranRespectfully submitted,
National Cementers CorporationBy: Clarion A. Cochran

CAIN 1-E
P - Sec. 25, T31N, R13W

March 5, 1982

RE: Rule 303, Section C, Paragraph 2, Requirement (h)

As stated before, we believe the production will substantially increase by commingling Dakota and Gallup gas within the well bore. The well will be able to utilize the full volume of the casing gas, which will allow the well to lift the water that is trying to log off the Dakota, increasing Dakota gas. It will also enable us to produce approximately 4 bbl of Gallup oil per day; thereby conserving energy.

CAIN 1-E
Sec. 25, T31N, R13W

March 5, 1982

RE: Rule 303, Section C, Paragraph 2, Requirement (i)

We would like to allocate 10% oil and 95% gas to the Dakota and 90% oil and 5% gas to the Gallup formations, based on production curves and previous well testing of the Cain 1-E and offset wells in the area.

WAIVER OF OBJECTION
AND CONSENT TO COMMINGLE THE
DUAL COMPLETION

FOR CONSOLIDATED OIL & GAS, INC.

THE UNDERSIGNED, as an offset operator/lease holder of a
lease offsetting

CAIN 1-E, Basin Dakota/Undesignated Gallup, 1450' F/SL &
1105' F/EL, Unit P - Section 25, T31N, R13W, San Juan
County, New Mexico

Does hereby acknowledge receipt of letter requesting approval of
commingling of the above captioned well.

The undersigned hereby waives any objection to this application
and voluntarily consents to the commingling of the above captioned
well.

DATED THIS _____ DAY OF _____, _____.

SIGNED: _____

NAME: _____

TITLE: _____

FIRM: _____

Please find enclosed self-addressed envelopes. Mail copy to
Frank Chavez, New Mexico Oil Conservation Commission, 1000 Brazos Rd.,
Aztec, NM 87410 and Barney Jones, Consolidated Oil & Gas, P.O. Box
2038, Farmington, NM 87401.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

CAIN 1-E Off-set operators

cc: SUPRON ENERGY CORP.

Attn: Rudy Motto

P.O. Box 808

Farmington, New Mexico 87401

ELPASO NATURAL GAS

Attn: Carl Matthews

P.O. Box 289

Farmington, New Mexico 87401

GULF ENERGY CORP.

Attn: Harry Kaltenbacher

6825 E. Tennessee Avenue, Ste. 360

Denver, Colorado 80222

LADD PETROLEUM

Attn: J.E. Stein, Prod. Mgr.

830 Denver Club Bldg.

Denver, Colorado 80202

RECEIVED

APR 20 1982

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

WAIVER OF OBJECTION

To dispense with 20 day waiting
period to down-hole commingle.

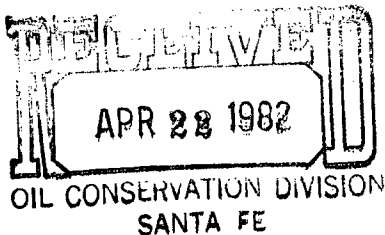
FOR CONSOLIDATED OIL & GAS, INC.

The undersigned, as an agent for the office of the
Secretary, Minerals Management Service, hereby acknowledges
receipt of letter requesting approval to dispense with the 20
day objection period, in the Application to Down-hole Commingle
the below captioned well:

CAIN 1-E - Basin Dakota/Undesignated Gallup
1450' F/SL & 1105' F/EL, Unit P - Section 25,
T31N, R13W, San Juan County, New Mexico

The undersigned hereby waives any objection and voluntarily
consents to dispense with the 20 day waiting period required by
NMOCC Rule 303.

Dated this 16th day of April 1982



Signed

Name

Title

John L. Keller

MMS

Production Unit Super

Please find enclosed self-addressed envelopes. Mail one copy to
Frank Chaves, NMOCC, 1000 Brazos Rd., Aztec, NM and one copy to
Barney Jones, Consolidated Oil & Gas, Inc., P.O. Box 2038, Farmington,
New Mexico



NMOCC

WAIVER OF OBJECTION
AND CONSENT TO COMMINGLE
DUAL COMPLETION



FOR CONSOLIDATED OIL & GAS, INC.

THE UNDERSIGNED, as an offset operator/lease holder of a
lease offsetting

CAIN 1-E, Basin Dakota/Undesignated Gallup, 1450' F/SL &
1105' F/EL, Unit P - Section 25, T31N, R13W, San Juan
County, New Mexico

Does hereby acknowledge receipt of letter requesting approval of
commingling of the above captioned well.

The undersigned hereby waives any objection to this application
and voluntarily consents to the commingling of the above captioned
well.

DATED THIS 16th DAY OF April, 1982

SIGNED:

George B. Mayfield

NAME:

George B. Mayfield

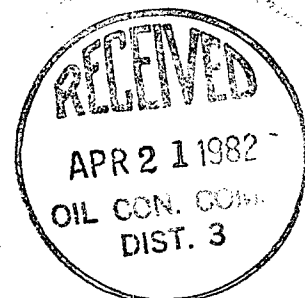
TITLE:

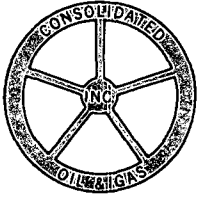
General Manager of Operations

FIRM:

Ladd Petroleum Corporation

Please find enclosed self-addressed envelopes. Mail copy to
Frank Chavez, New Mexico Oil Conservation Commission, 1000 Brazos Rd.,
Aztec, NM 87410 and Barney Jones, Consolidated Oil & Gas, P.O. Box
2038, Farmington, NM 87401.





Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80295
(303) 861-5252

P.O. BOX 2038
FARMINGTON, NEW MEXICO

April 13, 1982

UNITED STATES DEPARTMENT OF INTERIOR
Office of the Secretary
Minerals Management Service
Drawer 600
Farmington, New Mexico

Gentlemen;

Consolidated Oil & Gas, Inc. has submitted an application for down-hole commingling to the State of New Mexico Oil Conservation Commission, as required in State Rule 303.

The application has been submitted for the following well:

CAIN-1-E - Basin Dakota/Undesignated Gallup
1450' F/SL & 1105' F/EL, Unit P - Section 25,
T31N, R13W, San Juan County, New Mexico

Sincerely,

BARNEY JONES
Drilling Foreman

BJ/ke

WAIVER OF OBJECTION
AND CONSENT TO COMMINGLE THE
DUAL COMPLETION

FOR CONSOLIDATED OIL & GAS, INC.

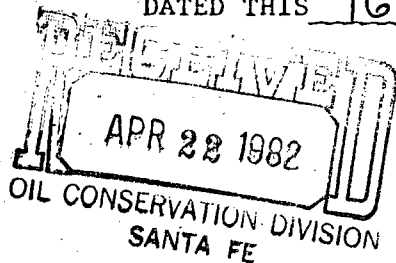
THE UNDERSIGNED, as an offset operator/lease holder of a
lease offsetting

CAIN 1-E, Basin Dakota/Undesignated Gallup, 1450' F/SL &
1105' F/EL, Unit P - Section 25, T31N, R13W, San Juan
County, New Mexico

Does hereby acknowledge receipt of letter requesting approval of
commingling of the above captioned well.

The undersigned hereby waives any objection to this application
and voluntarily consents to the commingling of the above captioned
well.

DATED THIS 16th DAY OF April 1982.



SIGNED: Donald C. Walker

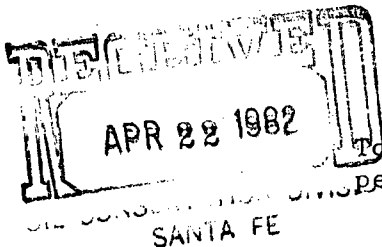
NAME: DONALD C. WALKER

TITLE: Mgr Drilling Operations

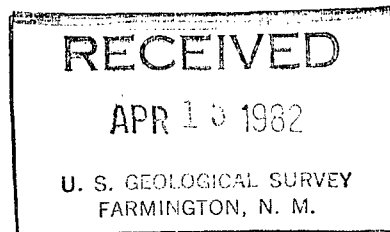
FIRM: EL PASO NATURAL GAS

Please find enclosed self addressed envelopes. Mail copy to
Frank Chavez, New Mexico Oil Conservation Commission, 1000 Brazos Rd.,
Aztec, NM 87410 and Barney Jones, Consolidated Oil & Gas, P.O. Box
2038, Farmington, NM 87401.





WAIVER OF OBJECTION



To dispense with 20 day waiting
period to down-hole commingle.

FOR CONSOLIDATED OIL & GAS, INC.

The undersigned, as an agent for the office of the
Secretary, Minerals Management Service, hereby acknowledges
receipt of letter requesting approval to dispense with the 20
day objection period, in the Application to Down-hole Commingle
the below captioned well:

CAIN 1-E - Basin Dakota/Undesignated Gallup
1450' F/SL & 1105' F/EL, Unit P - Section 25,
T31N, R13W, San Juan County, New Mexico

The undersigned hereby waives any objection and voluntarily
consents to dispense with the 20 day waiting period required by
NMOCC Rule 303.

Dated this 16th day of April 1982

Signed John L. Keller

Name _____

Title Production Unit Super.

Please find enclosed self-addressed envelopes. Mail one copy to
Frank Chaves, NMOCC, 1000 Brazos Rd., Aztec, NM and one copy to
Barney Jones, Consolidated Oil & Gas, Inc., P.O. Box 2038, Farmington,
New Mexico





STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

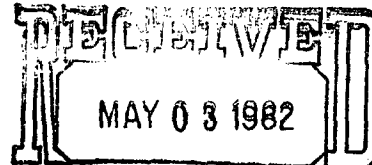
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE April 28, 1982

RE: Proposed MC _____
Proposed DHC 2 _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____



OIL CONSERVATION DIVISION
SANTA FE

Gentlemen:

I have examined the application dated April 19, 1982
for the Consolidated O & G Cain #1E P-25-31N-13W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Frank J. [Signature]