

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other In-
structions on
Reverse Side)Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐		5. LEASE DESIGNATION AND SERIAL NO. NM-8431	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Penjack Fed.	
2. NAME OF OPERATOR McClellan Oil Corporation		9. WELL NO. 2	
3. ADDRESS OF OPERATOR P.O. Drawer 730, Roswell, NM 88202		10. FIELD AND POOL, OR WILDCAT Pecos Slope Abo	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 660' FSL & 1980' FEL At top prod. interval reported below At total depth		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 12-T10S-R25E	
14. PERMIT NO.		12. COUNTY OR PARISH Chaves	
15. DATE SPUDDED 3/31/87		13. STATE NM	
16. DATE T.D. REACHED 4/9/87		19. ELEV. CASINGHEAD 3789' G.L.	
17. DATE COMPL. (Ready to prod.) 4/17/87		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3789' G.L.	
20. TOTAL DEPTH, MD & TVD 4710'		21. PLUG, BACK T.D., MD & TVD 4658'	
22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS 0-TD	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 4381' - 4421' Abo		25. WAS DIRECTIONAL SURVEY MADE Yes	
26. TYPE ELECTRIC AND OTHER LOGS RUN CNL-LDT-DLL		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
13-3/8"	54.5	74'	17-1/2"
8-5/8"	24	900'	12-1/4"
4-1/2"	9.5	4658'	7-7/8"
CEMENTING RECORD			
100 sx Class C			
250 sx Halliburton Lite			
200 sx Class C			
250 sx 65/35 Poz + 250 sx 1"			
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2-3/8"	4361'		
31. PERFORATION RECORD (Interval, size and number)			
4381, 83, 85, 87, 89, 91, 92, 93, 95, 97			
4401, 02, 03			
4410, 11, 12			
4420, 21 18 shots total			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
4381'-4421'		40,000 gal gelled 2% KCL water	
		50,000 lbs 20-40 sand	
		20,000 lbs 12-20 sand	
		1000 gals. 10% NEFE acid	
33.* PRODUCTION			
DATE FIRST PRODUCTION 4/17/87		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing	
DATE OF TEST 4/22/87		WELL STATUS (Producing or shut-in) shut-in	
HOURS TESTED 24	CHOKE SIZE 3/4"	PROD'N. FOR TEST PERIOD —→	OIL—BBL. -
			GAS—MCF. 1200
			WATER—BBL. -
			GAS-OIL RATIO -
FLOW. TUBING PRESS. 386	CASING PRESSURE 458	CALCULATED 24-HOUR RATE —→	OIL—BBL. -
			GAS—MCF. 1600
			WATER—BBL. -
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Shut-in			
35. LIST OF ATTACHMENTS 4 Point, Deviation Survey			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED [Signature]		TITLE Operations Manager	
DATE 4/29/87		DATE 4/29/87	

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Abo	4125'	4710'	Dry gas, red sand & shale	San Andres Glorieta Tubb Abo	760' 1985' 3372' 4125'	



LESLIE K. EVERTSON - ROSWELL
KENNETH D. REYNOLDS - ARTESIA

DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88201
TELEPHONES: ARTESIA 505/746-6757
ROSWELL 505/623-5070

April 16, 1987

McClellan Oil Corp.
PO Box 730
Roswell, NM 88201

Ref: Penjack Fed. #2

Gentlemen:

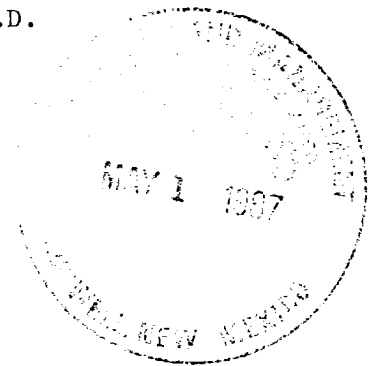
The following is a Deviation Survey on the above referenced well
located in Chaves County, New Mexico.

128' - 1/4 ⁰	2840' - 1 1/4 ⁰
506' - 1/4 ⁰	3339' - 1 ⁰
882' - 1 ⁰	3837' - 1 ⁰
1364' - 1 1/4 ⁰	4335' - 3/4 ⁰
1862' - 1 ⁰	4710' - 1 ⁰ T.D.
2351' - 1 1/4 ⁰	

Sincerely,

WEK DRILLING CO., INC.

Arnold Newkirk
Arnold Newkirk



STATE OF NEW MEXICO)
COUNTY OF CHAVES)

The foregoing was acknowledged before me this 16th day
of April 1987 by Arnold Newkirk.

MY COMMISSION EXPIRES:

Glenda Bea Newton
Notary Public

4-10-88

NORTHERN NATURAL GAS COMPANY
OBSERVED SURFACE DATA WORKSHEET
SHEET 1

TYPE TEST: ☒ INITIAL ☐ ANNUAL ☐ RETEST ☒ SPECIAL TEST DATE: _____

OPERATOR McClellan Oil Corp. LEASE Pen Jack Federal WELL NO. *2
SEC. P12 TWP. 10S RNG. 2SE COUNTY Chaves STA. NO. NONE PIPELINE CONN. VENT
GA SYSTEM Bitter Lake AREA Area FIELD South Pecos Slope RESERVOIR ABO

CSG. 4 1/2" x 4658 WT. 9.5 TBG. SIZE 2 3/8 WT. 4.7 PERFS. _____ TO _____
TYPE COMPLETION: SINGLE ☒ GAS-GAS () GAS-OIL () PACKER @ NONE ft. FLOW STRING @ _____ ft.

DATE ON _____ DATE _____ LENGTH _____ AVG. PREFLOW _____
PREFLOW _____ TIME _____ SHUT IN 4-23-87 TIME 12:30 pm OF PREFLOW _____ RATE _____

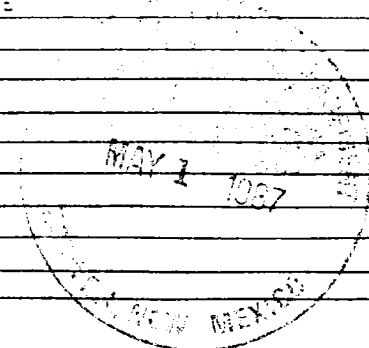
DATE SHUT IN _____ LENGTH OF _____ SHUT IN _____ SHUT IN _____
PRESS TAKEN 4-22-87 TIME 9:45 am SHUT IN _____ CSG. PRESS 979.7 psig TBG. PRESS 979.7 psig

GAS GRAVITY (Gm) _____ API GRAVITY _____ PROVER 2" METER _____ ORIFICE 3/8 TYPE _____
(Gg) 0.647 OF LIQUID @ 60°F _____ SIZE _____ RUN SIZE _____ SIZE _____ TAPS _____

DATE TIME OF READING	ELAP TIME HRS.	W.H. PRESSURE DATA				WELL HEAD TEMP	METER OR PROVER DATA			LIQUID HYDRO- CARBONS BBLs	WATER PRODUCED BBLs	REMARKS PERTINENT TO TEST DATA QUALITY
		CASING psig	Δ P CSG.	TUBING psig	Δ P TBG.		PRESS psig	DIFF.	TEMP.			
4-22-87												
9:45 am		979.7	0	979.7	0	57						SIP only
10:00 am	Zero	979.7	0	979.7	0	57	START	1-Point	Test			2" CFP 3/8" PLATE
10:15 am	0.25	835.4	-144.3	781.9	-147.8	63	781.9	-	63			Q=
10:30 am	0.50	795.7	-184.0	752.6	-227.1	66	752.6	-	66			ALL Pressures Deaerated.
10:45 am	0.75	771.6	-208.1	724.0	-255.7	71	724.0	-	71			Q=
11:00 am	1.0	746.1	-233.6	693.8	-285.9	74	693.8	-	74			Q=
11:15 am	1.25	735.4	-244.3	681.0	-298.7	70	681.0	-	70			
11:30 am	1.50	727.0	-252.7	673.9	-305.8	70	673.9	-	70			
11:45 am	1.75	718.1	-261.1	664.8	-314.9	68	664.8	-	68			
12:00 am	2.0	704.1	-275.6	647.3	-332.4	66	647.3	-	66			Q=
												N ₂ = 4.12%
												CO ₂ = 0.03%
												19.2% H ₂ O
4-23-87												
11:45 am	24.75	459.3	-520.4	388.3	-591.4	69	388.3	-	69			Q=
12:00 pm	25.0	458.9	-520.8	388.0	-591.7	69	388.0	-	69			mist at vent.
12:15 pm	25.25	458.7	-521.0	387.1	-592.6	69	387.1	-	69			Q=
12:30 pm	25.50	458.2	-521.1	386.8	-592.9	69	386.8	-	69			

TESTED BY: James Rame

WITNESSED BY: _____



NORTHERN NATURAL GAS COMPANY BACK-PRESSURE CALCULATION SHEET

TYPE TEST: ☒ INITIAL ☐ ANNUAL ☐ RETEST ☒ SPECIAL TEST DATE: 4-23-87

OPERATOR McClellan Oil Corp LEASE Penjack Federal WELL NO. #2
SEC. D12 TWP. 10S RING. 2SE COUNTY Chaves STA. NO. NONE PIPELINE CONN. VENT
GA SYSTEM _____ FIELD South Pecos Slope RESERVOIR ABO

CSG. SIZE 4 1/2 WT. 9.5* TBG. SIZE 2 3/8 WT. 4.7* PERFS: _____ TO _____
TYPE COMPLETION Single GAS PACKER @ NONE ft. AVG. VERTICAL DEPTH _____ ft.

TYPE LIQUID PRODUCED _____ LIQUID COMPOSITION _____ API GRAVITY _____
GAS GRAVITY (G_g/G_m) 0.647 CO₂ 0.03 % N₂ 4.12 % H₂S N/A P_{cr} 663 psia T_{cr} 361 °R
PRODUCING THRU Tubing TYPE TAPS NONE (PROVER)(METER) SIZE 2 BAR. PRESS. 15.025

METER OR PROVER DATA

OBSERVED DATA						COMPRESSABILITY FACTOR			REMARKS (QUALITY OF MEASUREMENT)
RATE NO.	ORIFICE SIZE IN.	(METER) (PROVER) TEMP °F	(METER) (PROVER) PRESSURE PSIG	(P _m X P _p) PSIA	DIFF (H _w)	(P _m X P _p) / P _{cr}	(T _m X T _p) / T _{cr}	Z	
1	0.375	63	781.9	796.93	-	1.20	1.45	0.869	Pseudocritical Property
2	0.375	74	693.8	708.83	-	1.07	1.48	0.890	Adjustments
3	0.375	66	647.3	662.33	-	1.00	1.46	0.892	CO ₂ = P _{cr} @ T _{cr} @
4	0.375	69	388.3	403.33	-	0.61	1.47	0.933	N ₂ = P _{cr} - 7 T _{cr} - 11
5	0.375	69	386.8	401.83	-	0.61	1.47	0.933	

FLOW RATE CALCULATION

RATE NO.	COEFF. MCF/DAY	(P _m H _w) (P _f)	EXTENSION $\sqrt{P_m H_w}$	GRAVITY FACTOR	METER TEMP. FACTOR	DEVIATION FACTOR	FLOW RATE MCF/DAY	LENGTH OF FLOW	REMARKS (TYPE OF FLOW)
1	2.378	796.93	-	1.243	0.9971	1.073	2520.2	0.25 hrs	All Pressures Deadweight
2	2.378	708.83	-	1.243	0.9868	1.060	2191.6	1.0 hrs	
3	2.378	662.33	-	1.243	0.9943	1.059	2061.4	2.0 hrs	
4	2.378	403.33	-	1.243	0.9915	1.035	1223.4	24.75 hrs	
5	2.378	401.83	-	1.243	0.9915	1.035	1218.9	25.50 hrs	

WELLHEAD SHUT-IN AND FLOWING DATA

RATE NO.	CASING PRESSURE DATA				TUBING PRESSURE DATA				WELL-HEAD TEMP OF	REMARKS (QUALITY OF PRESSURES)
	PSIG	(P _c) & (P _f)(P _i) PSIA	(P _w X P _i) / P _c	(P _c ²) & (P _w ²)(P _i ²)	PSIG	(P _c) & (P _f)(P _i) PSIA	(P _w X P _i) / P _c	(P _c ²) & (P _w ²)(P _i ²)		
SHUT IN	979.7	994.73	1.000	989.49	979.7	994.73	1.000	989.49	57	Hours shut in:
1	835.4	850.43	0.855	723.23	781.9	796.93	0.774	592.79	63	
2	746.1	761.13	0.765	579.32	693.8	708.83	0.713	502.44	74	
3	704.1	719.13	0.723	517.15	647.3	662.33	0.666	438.68	66	
4	459.3	474.33	0.477	224.98	388.3	403.33	0.405	162.68	69	
5	458.6	473.63	0.476	224.32	386.8	401.83	0.404	161.47	69	

SUMMARY

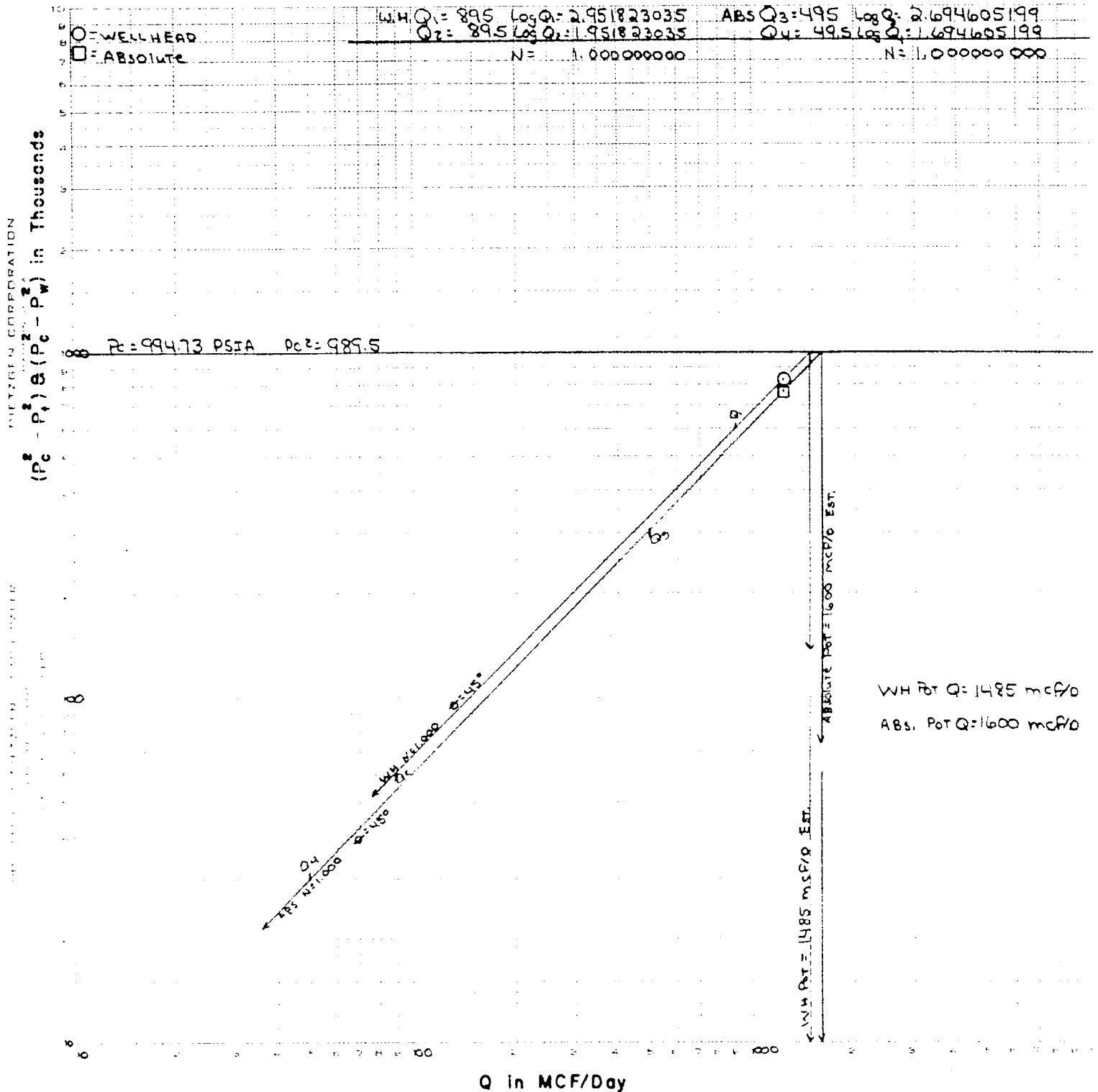
RATE NO.	WATER PROD. BBLs.	LIQUID PETR. BBLs.	GOR MCF/BBL	(P _c ² - P _w ²)	Q	(P _c ² - P _i ²)	WH slope (n):	ABS slope (n):
1				266.26	2520.2	396.70	1.000	1.000
2				410.17	2191.6	487.05	WH potential: 1485	MCF/D after 1600 hr.
3				472.34	2061.4	550.81	ABS potential: _____	MCF/D after _____ hr.
4				764.51	1223.4	826.81	72 hr. WH potential _____	MCF/D
5				765.17	1218.9	828.02	Stabl. WH potential _____	MCF/D
							DEL @ _____ after _____ hr.	MCF/D
							DEL @ 0.8 P _c after 72 hr.	MCF/D
							Stabl. DEL @ P _c = _____ psig	MCF/D
							72 hr to t ₀ hr stabl factor: _____	
							_____ hr to 72 hr stabl factor: _____	

REMARKS: _____

TESTED BY: James Rowe
CALCULATED BY: James Rowe

WITNESSED BY: NONE
CHECKED BY: NONE

BACK PRESSURE CURVE

FIELD
PLOT > onlyOperator McClellan Oil Corp Lease Penjack Federal Well No. #2County Chaves Field S Pecos Slope / ABO Location P) 12-10s-25EDate of Test 4-23-87 Slope "n" 1.000 W.H. 1.000 Abs.Calc. W.H. Potential 1485 mcf/d MCF/D Calc. Abs. Potential 1600 MCF/D

TRANSWESTERN PIPELINE COMPANY
(A SUBSIDIARY OF ENRON CORPORATION)

GAS QUALITY TEST REPORT

PRODUCER MIDDLELLAN OIL CO STATION NO. N/A
FIELD PECOS SLOPE EFFECTIVE DATE 4/23/87
RESERVOIR ASO LAB NUMBER 4
STATION NAME PENJACK #2

COMPONENTS	SPECIFIC GRAVITY	MOLE FRACTION	LIQUEFIABLE HYDROCARBONS	COMPONENT GPM	GPM CONTENT
NITROGEN	.9672	.0412	PROPANE	27.514	.5585
CARBON DIOXIDE	1.5195	.0003	ISOBUTANE	32.698	.1014
HELIUM	.1382		N-BUTANE	31.510	.1954
OXYGEN	1.1048	.0000	LPGL		.8553
HYDROGEN SULFIDE	1.1766	.0000	ISOPENTANE	36.582	.0658
WATER VAPOR	.6220	.0000	N-PENTANE	36.213	.0688
			HEXANES	41.111	.0534
			HEPTANES+	46.126	.0692
METHANE	.5539	.8700	NATURAL GASOLINE		.2573
ETHANE	1.0382	.0524			
PROPANE	1.5325	.0203	TOTAL LIQUEFIABLE GPM		1.1125
ISOBUTANE	2.0068	.0031			
N-BUTANE	2.0068	.0062	WATER VAPOR CONTENT:		
ISOPENTANE	2.4911	.0018	GAS MIXTURE STATIC PSIG		395.0
N-PENTANE	2.4911	.0019	FLOWING GAS TEMP (F)		50.0
HEXANES	2.9753	.0012	WATER VAPOR DEW POINT (F)		43.0
HEPTANES+	3.5807	.0015	LBS WATER VAPOR / MMCF		19.2
COMPOSITION-----		1.0000	DEHY INSTALLED (TW)		NO
			INSTRUMENT TYPE		RAN
			MOL FRACTION		.0004
MIXTURE SPECIFIC GRAVITY			SULFUR CONTENT (GR. PER 100 GP)		
CALC. FROM ANAL. (REAL)		.646	HYDROGEN SULFIDE		
DETERMINED BY TEST INST.		.647	MERCAPTANS		
			SULFIDES		
MIXTURE HEATING VALUE			RESIDUALS		
(BTU/CF @ 14.73 PSIA, 60F, SAT.)			TOTAL SULFUR		
CALCULATED FROM ANALYSIS		1068	MOLE FRACT H2S		
BY CALORIMETRY		NONE	COMPRESSIBILITY (Z)		.9575

SP. GR. DEVIATION ALLOWED FOR WATER VAPOR: .003
PR. 11:24 APR 23, 1987

ANALYST----- 【TW】

REMARKS: NEW WELL TEST