Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

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Form C-122
Revised 4-1-91

cl5F File

OIL CONSERVATION DIVISION

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

APR 3 0 1992

O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Read & Stevens, Inc.					Lease or Unit Name: West Haystack Federal		
Type Test: [X] Initial [ ] Annual [ ] Special					Test Date: 2/10/92	Well No.: 4	
Completion Date: 2/4/92	Total Depth: 5900			Plug Back TD: 5879	Elevation: 3843' GL	Unit Ltr. - Sec. - TWP - Rge.: G 30 6s 27e	
Csg. Size: $5\frac{1}{2}$"	Wt.: 17#	d: 4.892	Set At: 5900	Perforations: From: 5704 To: 5711		County: Chaves	
Tbg. Size: 2 3/8"	Wt.: 4.7#	d: 1.995	Set At: 5500	Perforations: From: OPEN To: ENDED		Pool: Wildcat Cisco ~~West Haystack~~	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 5500		Formation: Cisco	
Producing Thru: TBG	Reservoir Temp. °F: 123	Mean Annual Temp. °F: 60		Baro, Press - P_a: 13.2		Connection: Transwestern	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
–	–	0.651	0.14	4.30	–	–	2.067	FLG

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					1024	60°	PACKER		24 Hrs.
1.	2.067 x 1.250	285	10	54	1010				1.0 Hr.
2.	2.067 x 1.250	385	20	52	976				1.0 Hr.
3.	2.067 x 1.250	520	39	48	891				1.0 Hr.
4.	2.067 x 1.250	660	55	48	748				1.0 Hr.
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, F pv.	Rate of Flow Q, Mcfd
1.	8.120	54.61	298.2	1.006	1.239	1.029	569
2.	8.120	89.24	398.2	1.003	1.239	1.040	941
3.	8.120	144.20	533.2	1.012	1.239	1.055	1549
4.	8.120	192.42	673.2	1.012	1.239	1.070	2096
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.45	514	1.41	0.944
2.	0.60	512	1.41	0.925
3.	0.80	508	1.40	0.899
4.	1.02	508	1.40	0.873
5.				

Gas Liquid Hydrocarbon Ratio 859 Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons 57 Deg.
Specific Gravity Separator Gas 0.651 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 663 P.S.I.A. P.S.I.A.
Critical Temperature 364 R R

P_c 1217.2 * P_c^2 1481.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		1201.2	1442.9	38.7
2.		1181.2	1395.2	86.4
3.		1139.2	1297.8	183.8
4.		1086.2	1179.8	301.8
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.909$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.733$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5728.368$

Absolute Open Flow 5728 Mcfd @ 15.025

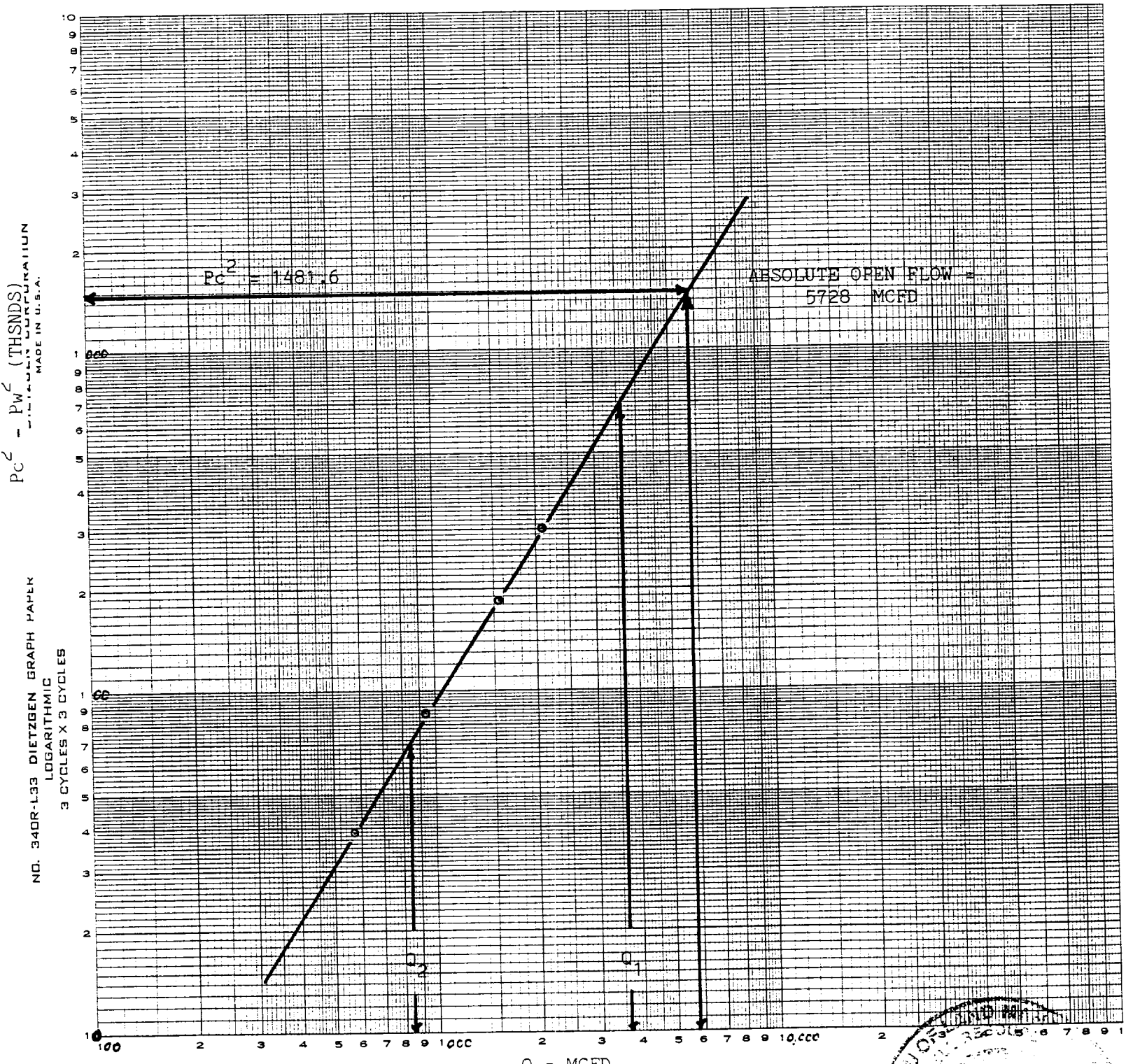
Angle of Slope Θ 57° 43' Slope, n 0.632

Remarks: * Bottom hole pressures @ 5708' (-1865) used for pressure calculations
Well produced $\frac{1}{4}$ bbl. condensate during test

RECEIVED FEB 1 8 1992 BUREAU OF LAND MANAGEMENT ROSWELL, NEW MEXICO

Approved By Division	Conducted By: Jarrel Services, Inc.	Calculated By: D. Dickerson	Checked By: D. Dickerson

COMPANY: Read & Stevens, Inc.
WELL: West Haystack Federal, No. 4
LOCATION: G 30 - 6s - 27e
COUNTY: Chaves
DATE: February 10, 1992



Q = MCFD

Q_1 = 3600 MCFD; Log Q_1 = 3.556303

Q_2 = 840 MCFD; Log Q_2 = 2.924279

n = 0.632024 = 0.632

FEB 13 1992

Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Jarrel Services Inc.
Attention: Mr. Donnie Dickerson
P. O. Box 1230
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: West Haystack Fed. #4
COMPANY: Read & Stevens
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 02-10-92
ANALYSIS DATE: 02-11-92
PRESSURE - PSIG
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: Jarrel Services
ANALYSIS BY: Rolland Perry

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Oxygen	(O2)		
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	4.30	
Carbon Dioxide	(CO2)	0.14	
Methane	(C1)	86.45	
Ethane	(C2)	5.10	1.360
Propane	(C3)	2.20	0.605
I-Butane	(IC4)	0.35	0.115
N-Butane	(NC4)	0.66	0.208
I-Pentane	(IC5)	0.20	0.073
N-Pentane	(NC5)	0.20	0.070
Hexane	(C6)	0.40	0.165
Heptanes Plus	(C7+)	0.00	0.000
		100.00	2.596

BTU/CU.FT. -	DRY	1087	MOLECULAR WT	18.8582
AT 14.650	DRY	1083		
AT 14.650	WET	1064	26# GASOLINE -	0.377
AT 15.025	DRY	1111		
AT 15.025	WET	1092		

SPECIFIC GRAVITY -	
CALCULATED	0.651
MEASURED	0.000

BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA
RECEIVED
FEB 18 1992
ROSWELL, NEW MEXICO

NM Oil Cons. Commission
Drawer DD
Artesia, NM 88210

Form 3160-4
(November 1983)
(formerly 9-330)

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

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.: NM-18970

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

RECEIVED
APR 30 1992
ACCEPTED FOR RECORD
PETER W. CHESTER
O.C.D.
ARTESIA, OFFICE

APR 27 1992
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: West Haystack Federal

2. NAME OF OPERATOR: Read & Stevens, Inc.

9. WELL NO.: 4

3. ADDRESS OF OPERATOR: P.O. Box 1518, Roswell, NM 88202

10. FIELD AND POOL, OR WILDCAT: Wildcat Cisco

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1980' FNL & 2310' FEL
At top prod. interval reported below
At total depth: 5948

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec 30-T6S-R27E

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Chaves | 13. STATE: NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-19-91	12-7-91	1-22-92	3842.9' GL	

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
5948'	5879'		→	All	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 5704-5711

25. WAS DIRECTIONAL SURVEY MADE:

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-CBL-VDL

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#	1105'	12 1/4"	450 sx, tail w/200 sx	
5 1/2"	15.5#	5942'	7 7/8"	275 sx, tail w/200 sx	

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"	5500'	5500'

31. PERFORATION RECORD (Interval, size and number): 5704-5711 1 SPF (total 8 holes)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5704-5711	500 gal 15% NEFE

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
1-22-92	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-8-92	24	15/64	→	2	1081	7	540,000:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
880	0	→	2	1081	7	52

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

TEST WITNESSED BY: Dan Lough

35. LIST OF ATTACHMENTS: Deviation Survey, 4 Pt.

BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA
FEB 18 1992
ROSWELL, NEW MEXICO

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

SIGNED John Mofey Jr. TITLE Petroleum Engineer DATE 2/14/92

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

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.

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):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Cisco	5564	5711	Fractured LS, Gas

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Glorietta	2032	
Tubb	3550	
Abo	4250	
Wolfcamp	4960	
Cisco	5564	