

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

OIL CONSERVATION DIVISION

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

WELL API NO.	30-025-30617
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FREE <input type="checkbox"/>
6. State Oil & Gas Lease No.	B-2317
7. Lease Name or Unit Agreement Name	M. E. HALE
8. Well No.	23
9. Pool name or Wildcat	VACUUM GRAYBURG/SAN ANDRES

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" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	
2. Name of Operator Phillips Petroleum Company	
3. Address of Operator 4001 Penbrook Street, Odessa, TX 79762	
4. Well Location Unit Letter <u>P</u> : <u>620</u> Feet From The <u>SOUTH</u> Line and <u>1250</u> Feet From The <u>EAST</u> Line Section <u>35</u> Township <u>17-S</u> Range <u>34-E</u> NMPM <u>LEA</u> County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4011.4 GR	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: FRACTURE STIMULATE ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

01/31/96 MIRU DDU, COOH W/RODS, NU BOP, COOH W/TBG, SDON.

02/01/96 RU CARDINAL SURVEYS, GR/TEMP LOG FORM 4640' - 3500', GIH W/SAND PUMP, GIH W/AMERADA PRESSURE GAUGES & HALLIBURTON D/HOLE GAUGE CARRIER, DOWN HOLE TOOLS @ 3300', SDON.

02/04/96 RUN TBG, SET RBP @ 4530', PKR SET @ 4528', TEST RBP TO 5000#, DUMP SAND ON TOP OF RBP, PULL UP TO 4490', SET PKR, RIG UP TO PUMP IN TO PERFS, ESTAB. RATE OF 5 BPM, 1500 PSI, SD, RU HES, GIH W/TOOLS TO 4450', COOH, RIG DOWN, SI, SDON.

02/05/96 RU HES, GIH W/TAS TOOL, SET TOL, COOH W/SLICK LINE RD HES, RU GARDIAN ISOLATION TOOL IN WELL HEAD, RU HES, FRAC EQUIP, RD HES, WELL OPENED UP INTO FRAC TANK TO FLOW BACK OVER NIGHT.

02/06/96 GIH W/ TBG TO TAS CSG TOOL, CIRC, MIRU SLICK LINE TRUCK, GIH TO FISH TAS TOOL, RD RD HES, (OVER)

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

SIGNATURE Larry M. Sanders TITLE Senior Regulation Analyst DATE 05/24/96
TYPE OR PRINT NAME Larry M. Sanders TELEPHONE NO. (915)368-1488

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE JUN 11 1996
CONDITIONS OF APPROVAL, IF ANY:

M. E. HALE #23 (CONTINUED)

02/07/96 RU CARDNAL, RUN TEMP LOG ON PERFS 4640-3500', FIELD
CALCULATIONS: 4357-4438, 4490-4518, 4552-4566, SET PKR @ 4288',
SWAB BACK LOAD: FL 1000' F/SURFACE, REC: 110 BW TR OIL, SD.

02/08/96 SWAB REPORT: START 900' F/SURFACE, CONSTANT @ 1500', REC: 193
BW 5 BO, SD.

02/10/96 SWAB REPORT: START 1100' F/SURFACE, END 1800', REC: 173 BW 3 BO
0 GAS BLOW.

02/11/96 RELEASE PKR, SAND FILL @ 4445', RU CHARGER, CIRC CLEAN T/RBP
4530', RU TBG TESTERS, TAC 4059' S/N 4322' RET TOOL 4325' (BTM), ND
BOP, NU WELLHEAD RU T/RUN RODS, SD.

02/12/96 GIH W/PMP & ROD STRING, PUMP T/BATTERY, FL 900'.

02/13/96 22 HR TST: 4.8 BO, 360 BW, 0 MCF, FL 1967 F/SURFACE.

02/14/96 24 HR TST: 0 BO, 370 BW, 0 MCF, FL 1534'.

02/15/96 24 HR TST: 1 BO, 373 BW, 0 MCF, FL 1730', TBG BACK PRESS VALVE 200
PSI, TEMP. DROP FROM REPORT.

05/24/96 24 HR TST: 30 BO 385 BW 6 MCF GAS,
COMPLETE DROP FROM REPORT

WELL NAME MALE, M.E.	FIELD C00023	AFEN 63-2524	DAY# 4	DATE 02/08/96
SUPERVISOR DON THORP	CONTRACTOR DIAMOND WELL SERVICE	RIG NAME/# DIAMOND/	DAILY COST \$ 29,420.00	CUMCOST \$ 39,633.00
CURRENT STATUS GIH W/TAS TOOL, RIG UP HALLIBURTON FOR SAND FRAC.	OBJECTIVE FRACTURE STIMULATE	AUTH COST \$ 66,025.00		

RESERVOIR NAME	ZONE	INTERVAL

SERVICE	CONTRACTOR	NUMBER	HOURS
SERVICE RIG	DIAMOND	4	14.00

SAFETY		
LAST BOP DRILL DATE	LOSS CONTROL INCIDENT (Y/N)?	# INCIDENT FREE DAYS
		4

TOTAL INPUT FLUID			
OIL	H2O	OTHER	BBL
CUM OIL	CUM H2O	CUM OTHER	BBL

FLUID RECOVERED			
OIL	H2O	OTHER	BBL
CUM OIL	CUM H2O	CUM OTHER	BBL

FLUIDS LEFT TO RECOVER			
OIL	H2O	OTHER	BBL
FLUID TYPE	FLUID DENSITY		

WELL TEST DATA								
TIME	TBQ PRESS	CSG PRESS	WHT	CHOKE SZ	PLATE SZ	GAS RATE	OIL/COND RATE	WATER RATE

FROM	TO	HOURS	CODE	OPERATION SUMMARY
06:00	08:00	2.00	W100	RIG UP HALLIBURTON SLICK LINE TRUCK, GIH WITH TAS TOOL (PRO TECHNIQS) TO TOP OF TOOL 4437 SET TOOL COOM W/SLICK LINE RD HES.
08:00	09:00	1.00	TE01	RIG UP GARDIAN ISOLATION TOOL IN WELL HEAD.
09:00	10:30	1.50	PR00	RIG UP HALLIBURTON FRAC EQUIPMENT ON WELL HEAD. HOLD SAFETY MEETING. TEST LINES, PUMP FRAC WORK AS FOLLOWS: <u>PUMPED INTO RESERVOIR AT 30-40 BPM. ISIP =</u> <u>1850 PSIG. REPEAT AND FOUND SAME ISIP. TEST</u> SURFACE LINES TO 5000 PSIG, OK. SET AND TEST POP-OFF VALVE TO 4500 PSIG. PERFORM AND ANALYZE FLUID EFFICIENCY TEST. PUMP LEASE WATER AT 5 RATES. VARIED RATES FROM 40 BPM TO 10 BPM BY CONSECUTIVELY SHUTTING DOWN PUMPS. RESULTS WERE: RATE: 42.0 37.0 31.6 20.5 10.3 PRESS: 2876 2744 2611 2346 2107 A PLOT OF PRESSURE VERSUS RATE INDICATED WELL WAS TIGHT WITH THE FLOW RESTRICTION A PROPERTY OF THE RESERVOIR NOT WITH THE PERFORATIONS. BASED ON THE RESULTS, IT WAS DETERMINED THAT THE FLUID EFFICIENCY WAS HIGH WHICH ELIMINATED THE NEED TO PERFORM THE MINI-FRAC.

(cont'd)

(cont'd)

OPERATIONAL COMMENTS & 24 HR SUMMARY

SET TAS TOOL, RU HALLIBURTON, PUMP FRAC JOB, RD HALLIBURTON

PUT WELL FLOWING, TO TANK.

file #11

Phillips 7-18-96 #22 P-25-17-24

PHILLIPS PETROLEUM CO.

DAILY COMPLETION/WORKOVER REPORT

WELL NAME HALE, M.E.		000023	FIELD	AFEN 62-2524	DAY# 4	DATE 02/08/96
SUPERVISOR DON THORP		CONTRACTOR DIAMOND WELL SERVICE	RIG NAME/# DIAMOND/	DAILY COST \$ 29,420.00	CUMCOST \$ 39,533.00	
CURRENT STATUS GIM W/TAS TOOL, RIG UP HALLIBURTON FOR SAND FRAC.			OBJECTIVE FRACTURE STIMULATE		AUTH COST \$ 66,025.00	
RESERVOIR NAME	ZONE	INTERVAL	SERVICE	CONTRACTOR	NUMBER	HOURS

WELL TEST DATA							
TIME	THO PROD	COGFRD	WFT	CHRG DB	PLATE DB	GAS RATE	OIL/COND RATE

FROM	TO	HOURS	CODE	OPERATION SUMMARY
				BASED ON THE HIGH FLUID EFFICIENCY, DIESEL WAS NOT REQUIRED IN THE FLUID. DIESEL TRUCK REQUIRED.
10:30	11:15	0.75	PROD	MIXED 10,000 LBS 20/40 MESH SAND. PUMPED 4000 GALS 15# LINEAR GEL PAD FOLLOWED BY 5000 GALLONS OF 2 PPG LINEAR GEL. DISPLACED WITH 110 BBLs FRESH WATER (HOLE VOLUME 107 BBLs TO TOP PERF). NO PRESSURE RESPONSE WHEN PUMPING SAND. IDEA WAS TO PLUG FRACTURES IN THE EVENT MULTIPLE FRACTURES WERE BEING INITIATED.
11:15	12:00	0.75	PROD	MIXED SECOND 10,000 LB 20/40 MESH SAND. PUMPED 4000 GALS 15# LINEAR GEL PAD FOLLOWED BY 5,000 GALLONS OF 2 PPG LINEAR GEL. DISPLACED WITH 110 BBLs FRESH WATER. NO PRESSURE RESPONSE WHEN SAND HIT FORMATION. BASED ON RESULTS, IT WAS BELIEVED THAT THE HIGH FRACTURE INITIATION PRESSURE WAS NOT THE RESULT OF MULTIPLE FRACTURES, BUT WAS DUE TO A HIGH ANGLE FRACTURE. DECISION WAS MADE TO PUMP JOB AT 50 BPM IN ORDER TO ENSURE MAXIMUM FRACTURE WIDTH.
12:00	12:15	1.25	PROD	PERFORM BREAK TESTS. COULD NOT GET ADEQUATE BREAK TIMES. FOUND HALLIBURTON HAD MIXED 40# GEL INSTEAD OF 15#. DECIDED TO PUMP 40# GEL TO INCREASE FRACTURE WIDTH. AN ADDITIONAL 350 BBLs OF FRESH WATER WAS BROUGHT TO LOCATION IN ORDER TO HAVE ENOUGH GEL TO PUT THE NEW MIXTURE IN. INCREASING THE RATE OF RAMPING TO 6 LB/GAL.
16:15	16:30	0.25	PROD	COMPLETE BREAKER TESTS. MET WITH HALLIBURTON TO DISCUSS MIXING INSTRUCTIONS. HELD SAFETY MEETING WITH ALL PERSONNEL.
16:30	17:00	0.50	PROD	PUMP FRAC JOB. (TAG FRAC SAND WITH CARDINAL SURVEYS) PUMP AS FOLLOWS: 5500 GALLONS 40# GEL PAD. 5000 GALLONS 40# GEL LOADED W/ 3 LB/GAL 16/30 BRADY SAND. 1000 GALLONS 40# GEL LOADED W/ 4 1/2 LB/GAL 16/30 BRADY SAND. 5000 GALLONS 40# GEL LOADED W/ 6 LB/GAL 16/30 BRADY SAND. 2800 GALLONS FRESH WATER. WELL BEGAN TO PRODUCE UP AS SOON AS 6 LB/GAL SAND HIT FORMATION. CUT TO FLUSH WHEN

WELL WORKOVER REPORT

NAME, M.E.		FIELD		AF#		DAY#		DATE	
SUPERVISOR		CONTRACTOR		REG NAME/NO		DAILY COST		CUMULATIVE COST	
DON THOMAS		DIAMOND WELL SERVICE		DIAMOND/		\$ 29,420.00		\$ 39,621.00	
CURRENT STATUS				OBJECTIVE				AUTH COST	
GIL W/TAS TOOL, RIG UP HALLIBURTON FOR SAND FRAC.				FRACTURE STIMULATE				\$ 55,025.00	
RESEVOIR NAME		ZONE		INTERVAL		SERVICE		CONTRACTOR	
								NUMBER	
								HOURS	
WELL TEST DATA									
TIME	TRG SPEC	SSPRESS	WHT	CHOKE SZ	PLATE SZ	GAS RATE	OIL/COND RATE	WATER RATE	
OPERATION SUMMARY									
FROM	TO	HOURS	CODE						
				SURFACE CASING PRESSURE GOT TO 4700 PSIG. WHEN HALLIBURTON CUT TO FLUSH, THE PUMP OPERATOR SHUT DOWN THE PUMPS. WERE ABLE TO GET BACK TO 18 BBL/MIN AND FINALLY 30 BBL/MIN BEFORE POP-OFF VALVE SET PRESSURE OF 4500 PSIG WAS REACHED (STOPPED TAS WHEN FLUSH INITIATED).					
17:00	18:00	1.00	PROO	IMMEDIATELY BEGAN FLOW BACK AT 2 BPM. CUT OUT THE HALLIBURTON DEBOMS DURING FLOW BACK. FLUIDS WERE CHECKED FOR RADIOACTIVITY, WITH NONE DETECTED. AFTER SECOND ELBOW CUT-OUT, HALLIBURTON WAS RIGGED DOWN.					
18:00	20:00	2.00	RU01	RIG DOWN HALLIBURTON. WELL OPENED UP INTO FRAC TANK. TO FLOW BACK OVER NITE.					