

Submit To Appropriate District Office State Lease #6 copies Fee Lease - 5 copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised June 10, 2003 WELL API NO. 30-015-32938 5. Indicate Type of Lease STATE ☒ FEE ☐ State Oil & Gas Lease No.
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WELL COMPLETION OR RECOMPLETION REPORT AND LOG					
1a. Type of Well: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER _____			7. Lease Name or Unit Agreement Name ESPERANZA "22" STATE COM		
b. Type of Completion: NEW ☒ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF. WELL ☐ OVER BACK RESVR. ☐ OTHER _____					
2. Name of Operator PURVIS OPERATING CO.			8. Well No. 1		
3. Address of Operator P O Box 11006, Midland, TX 79702-8006			9. Pool name or Wildcat Burton Flat Morrow		
4. Well Location Unit Letter <u>I</u> : <u>1775'</u> Feet From The <u>SOUTH</u> Line and <u>660'</u> Feet From The <u>EAST</u> Line Section <u>22</u> Township <u>21-S</u> Range <u>27-E</u> NMPM <u>EDDY</u> County					
10. Date Spudded 8-26-2003	11. Date T.D. Reached 10-09-2003	12. Date Compl. (Ready to Prod.) 11-05-2003	13. Elevations (DF& RKB, RT, GR, etc.) 3242 kB	14. Elev. Casinghead 3225	
15. Total Depth 11,850	16. Plug Back T.D. 11,778	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools X Cable Tools	19. Producing Interval(s), of this completion - Top, Bottom, Name 11,492' - 11,513'	
21. Type Electric and Other Logs Run Azimuthal LL-Micro - CFL/GR & Lith. Density / CNL / GR			20. Was Directional Survey Made NO		
23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48	516'	17 1/2"	435 sks	None
9 5/8"	36	2,652'	12 1/4"	1,056 sks	None
5 1/2"	17	11,850'	8 3/4"	950 sks	None
24. LINER RECORD					
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	
26. Perforation record (interval, size, and number) 11,492'-94' and 11,497'-513' 0.43" dia holes @ 4 spf = 73 holes			27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 11,492 - 11,513' AMOUNT AND KIND MATERIAL USED NONE		
28. PRODUCTION					
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)		Well Status (Prod. or Shut-in) S.I.	
Date of Test 11-7-2003	Hours Tested 4	Choke Size 18/64	Prod'n For Test Period	Oil - Bbl ---	Gas - MCF 67
Flow Tubing Press. 1472	Casing Pressure PKR	Calculated 24-Hour Rate	Oil - Bbl. ---	Gas - MCF 1,608	Water - Bbl. ---
29. Disposition of Gas (Sold, used for fuel, vented, etc.) FLARED					Test Witnessed By Mark Dehlinger
30. List Attachments Deviation Survey; Copy of Log Heading; C-104; C-122					
31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief					
Signature			Printed Name <u>DONNIE E. BROWN</u> Title <u>Petroleum Engr.</u> Date <u>November 11, 2003</u>		
E-mail Address <u>eng@purvisop.com</u>					

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon <u>9,850</u>	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn <u>10,274</u>	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware Sand <u>2,684</u>	T. Todilto	T.
T. Drinkard	T. Bone Springs	T. Entrada	T.
T. Abo	T. Morrow <u>11,352</u>	T. Wingate	T.
T. Wolfcamp <u>9124</u>	T.	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C) <u>9566</u>	T.	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from.....11,492.....to.....11,513.....
 No. 2, from.....to.....
 No. 3, from.....to.....
 No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
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OPERATOR: PURVIS OPERATING
WELL/LEASE: ESPERANZA 22 ST. COM. 1
COUNTY: EDDY

507-0084

STATE OF NEW MEXICO
DEVIATION REPORT

111	1/2	7,411	1 1/4
200	1/4	7,910	1 1/2
289	1/4	8,400	2
379	1/4	8,901	2 1/2
471	1/4	9,026	2 1/4
624	1/2	9,120	2
740	1/2	9,276	2 1/2
889	1	9,418	2 3/4
1,013	1/2	9,511	3
1,169	1/2	9,606	2 1/2
1,294	1/2	9,700	2
1,544	3/4	9,949	2 1/4
1,792	3/4	10,232	2 1/2
2,075	1 1/2	10,483	2
2,201	3/4	10,734	2 1/4
2,451	3/4	10,953	2 1/4
2,606	3/4	11,203	2
3,063	1	11,574	1 3/4
3,513	1/2	11,820	1 3/4
3,969	3/4		
4,415	1		
4,865	1		
5,312	1		
5,751	2 1/2		
5,844	2		
5,971	2		
6,096	1 3/4		
6,556	1		
7,036	1 1/4		

RECEIVED

NOV 13 2003

OCD-ARTESIA

By: Steve Moore

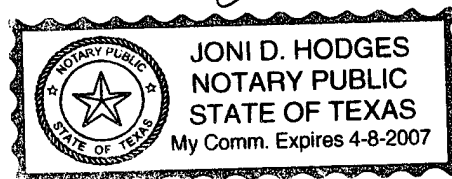
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 15th day of October, 2003, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

Joni D. Hodges
Notary Public for Midland County, Texas

My Commission Expires: 4/08/2007



NOV 13 2003 Form C-122
Revised October, 1999
OCD-ARTESIA

Operator						PURVIS OPERATING				Lease or Unit Name				ESPERONZA			
Type Test ☒ Initial ☐ Annual ☐ Special								Test Date 11/7/03				Well No. 22-1					
Completion Date 11/4/03				Total Depth 11850				Plug Back TD 11775				Elevation					
Csg. Size 5 1/2		Wt. 17		d 4.892		Set At 11850		Perforations: From: 11492 To: 11513				County EDDY					
Thg. Size 2 7/8		Wt. 6.5		d 2.441		Set At 11491		Perforations: From: To:				Pool					
Type Well-Single-Bradenhead-G.O. or G.O. Multiple SINGLE								Packer Set At 11405				Formation					
Producing Thru TUBING				Reservoir Temp. 190		Mean Annual Temp. 60		Baro. Press.-P _a 13.2				Connection AIR					
I. 11416		H 11416		Gg 0.601		%CO ₂ 0.676		%N ₂ 0.302		%H ₂ S		Prover		Meter Run 4.026		Taps FLG	
FLOW DATA								TUBING DATA				CASING DATA					
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff h _w	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.			Duration of Flow			
SI								2396				PKR					
1		4.026 X 1.500	400	5	100			2102						1 HR			
2		4.026 X 1.500	400	10	105			1972						1 HR			
3		4.026 X 1.500	400	17	105			1783						1HR			
4		4.026 X 1.500	400	32	110			1472						1HR			
5																	
RATE OF FLOW CALCULATIONS																	
No.	COEFFICIENT (24 Hour)		✓ h _p P _m	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}		Rate of Flow Q. Mcfd								
1	10.84		45.4	413.2	0.9636	1.29	1.049		641								
2	10.84		64.2	413.2	0.9594	1.29	1.048		902								
3	10.84		83.8	413.2	0.9594	1.29	1.048		1178								
4	10.84		114.9	413.2	0.9551	1.29	1.048		1608								
5																	
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio		N/A		Mcft bbl								
1	0.83	560	1.46	0.908	A.P.I. Gravity of Liquid Hydrocarbons		N/A		Deg								
2	0.83	565	1.48	0.91	Specific Gravity Separator Gas		0.601		XXXXXX								
3	0.83	565	1.48	0.91	Specific Gravity Flowing Fluid		XXXXXX										
4	0.84	570	1.49	0.911	Critical Pressure		674		P.S.I.A. _____ P.S.I.A. _____								
5					Critical Temperature		381		R. _____								
P _c 2394.7		P _{c2} 5734.6															
No.	P _i ²	P _w	P _w ²	P _c ² -P _w ²	(1) $\frac{P_o^2}{P_o^2 - P_w^2} = \frac{1.63}{\quad}$ (2) $\left[\frac{P_o^2}{P_o^2 - P_w^2} \right]^n = \frac{1.63}{\quad}$												
1		2084.6	4346.2	1388.4	AOF = Q $\left[\frac{P_o^2}{P_c^2 - P_w^2} \right]^n = \frac{\quad}{2622.6}$												
2		1957.7	3832.6	1902													
3		1776.3	3155.2	2579.4													
4		1495.4	2236.2	3498.4													
5																	
Absolute Open Flow 2622.6				Mcfd @ 15.025		Angle of Slope (°): 45		Slope n: 1									
Remarks: * NO LIQUID MADE DURING TEST. CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES.																	
Approved By Division:			Conducted By: PRO WELL TESTING			Calculated By: MERV BUECKER			Checked By: BM								

**PURVIS OPERATING
ESPERANZA "22" #1**