

RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

Form W-2

Rev. 4/1/83

483-046

FOD1296

Type or print only

API No. 42- 003-40971

7. RRC District No.

08

8. RRC Lease No.
21930

Oil Well Potential Test, Completion or Recompletion Report, and Log

1. FIELD NAME (as per RRC Records or Wildcat) Fuhrman-Mascho		2. LEASE NAME Block 10 Fuhrman-Mascho Unit		9. Well No. 968	
3. OPERATOR'S NAME (Exactly as shown on Form R-5, Organization Report) Range Production Company			RRC Operator No. 691703		10. County of well site Andrews
4. ADDRESS 100 Throckmorton Street Suite 1200 Fort Worth TX 76102				11. Purpose of filing	
5. If Operator has changed within last 60 days, name former operator.				Initial Potential <input checked="" type="checkbox"/>	
6a. Location (Section, Block, and Survey) Sec. 14, Blk 10, University Land Survey U-298				6b. Distance and direction to nearest town in this county. 13.5 miles SW from Andrews	
12. If workover or reclass, give former field (with reservoir) & gas ID or oil lease no. FIELD & RESERVOIR		GAS ID or OIL LEASE #		Oil - O Gas - G	WELL NO.
				Retest <input type="checkbox"/>	
				Reclass <input type="checkbox"/>	
				Well record only <input type="checkbox"/> (explain in Remarks)	
13. Type of electric or other log run Spectral Density Dual Spaced Neutron Spectral GR - DLL				14. Completion or recompletion date 02-10-09	

SECTION I: POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified in field rules.

15. Date of Test 3-10-09		16. No. of hours tested 24		17. Production method (Flowing, Gas Lift, Jetting, Pumping- Size & Type of pump) Pumping		18. Choke size	
19. Production during Test Period		Oil - BBLs 24	Gas -- MCF 20	Water -- BBLs 1178	Gas - Oil Ratio .83333	Flowing Tubing Pressure -- PSI	
20. Calculated 24- Hour Rate		Oil - BBLs 24	Gas -- MCF 20	Water -- BBLs 1178	Oil Gravity—API—60° 32.0	Casing Pressure -- PSI	
21. Was swab used during this test? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			22. Oil produced prior to test (New & Reworked wells) 1			23. Injection Gas—Oil Ratio --	
REMARKS:							

INSTRUCTIONS: File an original and one copy of the completed Form W-2 in the appropriate RRC District Office within 30 days after completing a well and within 10 days after a potential test. If an operator does not properly report the results of a potential test within the 10-day period, the effective date of the allowable assigned to the well will not extend back more than 10 days before the W-2 was received in the District Office. (Statewide Rules 16 and 51) To report a completion or recompletion, fill in both sides of this form. To report a retest, fill in only the front side.

WELL TESTER'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test by observation of (a) meter readings or (b) the top and bottom gauges of each tank into which production was run during the test. I further certify that the potential test data shown above is true, correct, and complete, to the best of my knowledge.

Signature: Well Tester

Name of Company

RRC Representative

OPERATOR'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Linda C. Stiles

Typed or printed name of operator's representative

(817) 869-4208

Telephone: Area Code

Number

Date: 03 / 11 / 2009

mo. day year

Senior Engineering Technician

Title of Person

Signature

Linda C. Stiles

SECTION II

DATA ON WELL COMPLETION AND LOG (Not Required on Retest)

Form provided by Forms On-A-Disk, Inc. • Dallas, Texas • (214) 340-9429

24. Type of Completion New Well <input checked="" type="checkbox"/> Deepening <input type="checkbox"/> Plug Back <input type="checkbox"/> Other <input type="checkbox"/>				25. Permit to Drill, Plug Back or Deepen DATE 01-07-2009 PERMIT NO. 676889			
26. Notice of Intention to Drill this well was filed in Name of Range Production Company				Rule 37 Exception CASE NO.			
				Water Injection Permit PERMIT NO.			
27. Number of producing wells on this lease in this field (reservoir) including this well 41		28. Total number of acres in this lease 6134.43		Salt Water Disposal Permit PERMIT NO.			
29. Date Plug Back, Deepening, Workover or Drilling Operations: 1-19-09		Commenced 1-19-09		Completed 1-25-09			
		30. Distance to nearest well, Same Lease & Reservoir 3001		Other PERMIT NO.			
31. Location of well, relative to nearest lease boundaries of lease on which this well is located 389 Feet From North Line and 2477 Feet from East Line of the Block 10 Furhman-Mascho Unit Lease							
32. Elevation (DF, RKB, RT, GR, ETC.) 3198				33. Was directional survey made other than inclination (Form W-12)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
34. Top of Pay 4414'	35. Total Depth 4705'	36. P.B. Depth 4665	37. Surface Casing Determined by: Field <input type="checkbox"/> Rules <input type="checkbox"/> Recommendation of T.D.W.R. <input checked="" type="checkbox"/> Railroad Commission (Special) <input type="checkbox"/>	01-05-09 Dt. of Letter			
38. Is well multiple completion? No	39. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No. FIELD & RESERVOIR			40. Intervals Drilled by: Rotary Tools <input checked="" type="checkbox"/> Cable Tools <input type="checkbox"/>			
41. Name of Drilling Contractor Patterson-UTI				42. Is Cementing Affidavit Attached? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
43. CASING RECORD (Report All Strings Set in Well)							
CASING SIZE	WT #/FT.	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu. ft.
8 5/8	24	435		250 sx Class C	11	Surface	337.5
4 1/2	11.6	4701		1050 sx Class C	7 7/8	Surface	1996
44. LINER RECORD							
Size	TOP		Bottom		Sacks Cement	Screen	
45. TUBING RECORD							
Size	Depth Set	Packer Set	46. Producing Interval (this completion) Indicate depth of perforation or open hole				
2 3/8	4655		From	4532	To	4535	
			From	4568	To	4571	
			From		To		
			From		To		
47. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
Depth Interval			Amount and Kind of Material Used				
4532 - 4571			Acidize w/1000 gals 15% HCL acid & additives				
			Frac w/39,774 gals gelled wtr & additives w/142,060# 20/40 sand				
48. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)							
Formations	Depth		Formations	Depth			
Yates	2925		Grayburg	4137			
7 Rivers	3126		Fuhrman D	4350			
Queen	3486		San Andres	4414			
REMARKS							

RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION

Form W-12

DBC1297 (1-1-71)

RIG#: 63

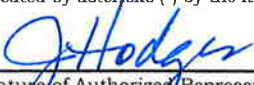
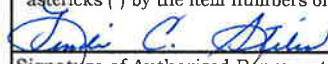
INCLINATION REPORT (One Copy Must Be Filed With Each Completion Report)		6. RRC District 08
1. FIELD NAME (as per RRC Records or Wildcat) Fuhrman-Mascho	2. LEASE NAME BLOCK 10 FUHRMAN-MASCHO UNIT	7. RRC Lease Number (Oil completions only) 21930
3. OPERATOR RANGE PRODUCTION CO.		8. Well Number 968
4. ADDRESS 100 THROCKMORTON, #1200 - FORT WORTH, TX 76102		9. RRC Identification Number (Gas completions only)
5. LOCATION (Section, Block and Survey) SEC 14, BLK 10, ULS		10. County ANDREWS

RECORD OF INCLINATION

11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	13. Angle of Inclination (Degrees)	14. Displacement per (Hundred Feet (Sine of Angle X 100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
422	4.22	0.00	0.00	0.00	0.00
894	4.72	0.25	0.44	2.06	2.06
1363	4.69	1.00	1.75	8.19	10.24
1833	4.70	0.75	1.31	6.15	16.40
2366	5.33	1.00	1.75	9.30	25.70
2865	4.99	2.00	3.49	17.41	43.11
3337	4.72	2.25	3.93	18.53	61.64
3833	4.96	2.75	4.80	23.80	85.44
4308	4.75	1.75	3.05	14.51	99.95
4688	3.80	2.00	3.49	13.26	113.21
4705	0.17	2.00	3.49	0.59	113.80

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form? ☐ yes ☒ no
18. Accumulative total displacement of well bore at total depth of 4705 feet = 113.8 feet.
- *19. Inclination measurements were made in ☐ Tubing ☐ Casing ☐ Open hole ☒ Drill Pipe
20. Distance from surface location of well to the nearest lease line 389 feet.
21. Minimum distance to lease line as prescribed by field rules _____ feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? No
- (If the answer to above question is "yes," attach written explanation of the circumstances.)

<p>INCLINATION DATA CERTIFICATION</p> <p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both side of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.</p> <p></p> <p>Signature of Authorized Representative JONI HODGES, ADMIN. ASSISTANT</p> <p>Name of Person and Title (type or print) PATTERSON-UTI DRILLING COMPANY LLC.</p> <p>Name of Company</p> <p>Telephone: <u>432</u> - <u>682-9401</u></p> <p style="text-align: center;">Area Code</p>	<p>OPERATOR CERTIFICATION</p> <p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data is presented on both sides of this forms are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.</p> <p></p> <p>Signature of Authorized Representative Linda C. Stiles Sr Engineering Tech</p> <p>Name of Person and Title (type or print) Range Production Company</p> <p>Operator</p> <p>Telephone: <u>817</u> - <u>869-4208</u></p> <p style="text-align: center;">Area Code</p>
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Railroad Commission Use Only:

Approved By: _____ Title: _____ Date: _____

* Designates items certified by company that conducted the inclination surveys.

Cementer: Fill in shaded areas.
Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-15
Cementing Report
Rev. 4/1/83
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) Range Production Company	2. RRC Operator No. 691703	3. RRC District No. 08	4. County of Well Site Andrews
5. Field Name (Wildcat or exactly as shown on RRC Records) Fuhrman-Mascho		6. API No. 42-003-40971	7. Drilling Permit No. 676889
8. Lease Name Block 10 Fuhrman-Mascho Unit	9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 21930	11. Well No. 968

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		1/19/08					
13. • Drilled Hole Size		11					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		8 5/8					
15. Top of liner (ft.)							
16. Setting depth (ft.)		435					
17. Number of centralizers used		4					
18. Hrs. Waiting on cement before drill-out		24					
1st Slurry	19. API cement used: No. of sacks	250					
	Class	Class C					
	Additives	Remark 1					
2nd Slurry	No. of sacks						
	Class						
	Additives						
3rd Slurry	No. of sacks						
	Class						
	Additives						
1st	20. Slurry pumped: Volume (cu. ft.)	337.5					
	Height (ft.)	1325					
2nd	Volume (cu. ft.)						
	Height (ft.)						
3rd	Volume (cu. ft.)						
	Height (ft.)						
Total	Volume (cu. ft.)	337.5					
	Height (ft.)	1325					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		YES					

Remark 1 – C + 2% CACL2 + .125#/sk Celloflake
10 BBLs of cement returned to surface = 41 sacks

Cement: Fill in shaded areas.
Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-15
Cementing Report
Rev. 4/1/83
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <i>RANGE</i> Production Company	2. RRC Operator No. 691703	3. RRC District No. 08	4. County of Well Site <i>ANDREWS</i>
5. Field Name (Wildcat or exactly as shown on RRC Records) Fuhrman-Mascho		6. API No. 42-003-40971	7. Drilling Permit No. 676889
8. Lease Name Block 10 Fuhrman-Mascho Unit	9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 21930	11. Well No. 968

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				1-25-2009			
13. • Drilled Hole Size				7 7/8			
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)				4 1/2			
15. Top of liner (ft.)							
16. Setting depth (ft.)				4710			
17. Number of centralizers used				25			
18. Hrs. Waiting on cement before drill-out				24			
1st Slurry	19. API cement used: No. of sacks			800			
	Class			C			
	Additives			SEE REMARKS #1			
2nd Slurry	No. of sacks			250			
	Class			C			
	Additives			SEE REMARKS #2			
3rd Slurry	No. of sacks						
	Class						
	Additives						
1st	20. Slurry pumped: Volume (cu. ft.)			1656			
	Height (ft.)			7270			
2nd	Volume (cu. ft.)			340			
	Height (ft.)			1493			
3rd	Volume (cu. ft.)						
	Height (ft.)						
Total	Volume (cu. ft.)			1996			
	Height (ft.)			8763			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				YES			

REMARKS #1: C (35POZ:65C:6GEL) + 6% SALT + .125 #/SK CELLO FLAKE
REMARKS #2: C (50POZ:50C:2GEL) + 5% SALT + .125 #/SK CELLO FLAKE
CIRCULATED 190 SACKS OF CEMENT TO PIT



Texas Commission
on Environmental Quality
Surface Casing Program

DEPTH OF USABLE-QUALITY GROUND WATER TO BE PROTECTED

Date January 5, 2009

TCEQ File No.: SC- 12943

API Number 00300000

RRC Lease No. 021930

Attention: PAULA HALE

SC_691703_00300000_021930_12943.pdf

RANGE PRODUCTION CO
7901 FM 1902
JOSHUA TX 76102

--Measured--

2477 ft FEL

2311 ft FSL

MRL:SECTION

P-5# 691703

Digital Map Location:

X-coord/Long 403523

Y-coord/Lat 223777

Datum 27 Zone NC

County ANDREWS

Lease & Well No. FUHRMAN-MASCHO UNIT #968

Purpose ND

Location SUR-UL,BLK-10,SEC-14,--[TD=4900],[RRC 8],

To protect usable-quality ground water at this location, the Texas Commission on Environmental Quality recommends:

The interval from the land surface to a depth of 250 feet
and the zone from 1100 feet to 1550 feet must be protected.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Approval of the well completion methods for protection of this groundwater falls under the jurisdiction of the Railroad Commission of Texas. **This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).**

If you have any questions, please contact us at 512-239-0515, sc@tceq.state.tx.us, or by mail MC-151.

Sincerely,

Digitally signed by Jack M. Oswalt
DN: c=US, st=Texas, l=Austin, ou=Surface
Casing, o=Texas Commission on
Environmental Quality, cn=Jack M. Oswalt,
email=joswalt@tceq.state.tx.us
Date: 2009.01.05 09:10:55 -06'00'

Jack M. Oswalt, P.G.

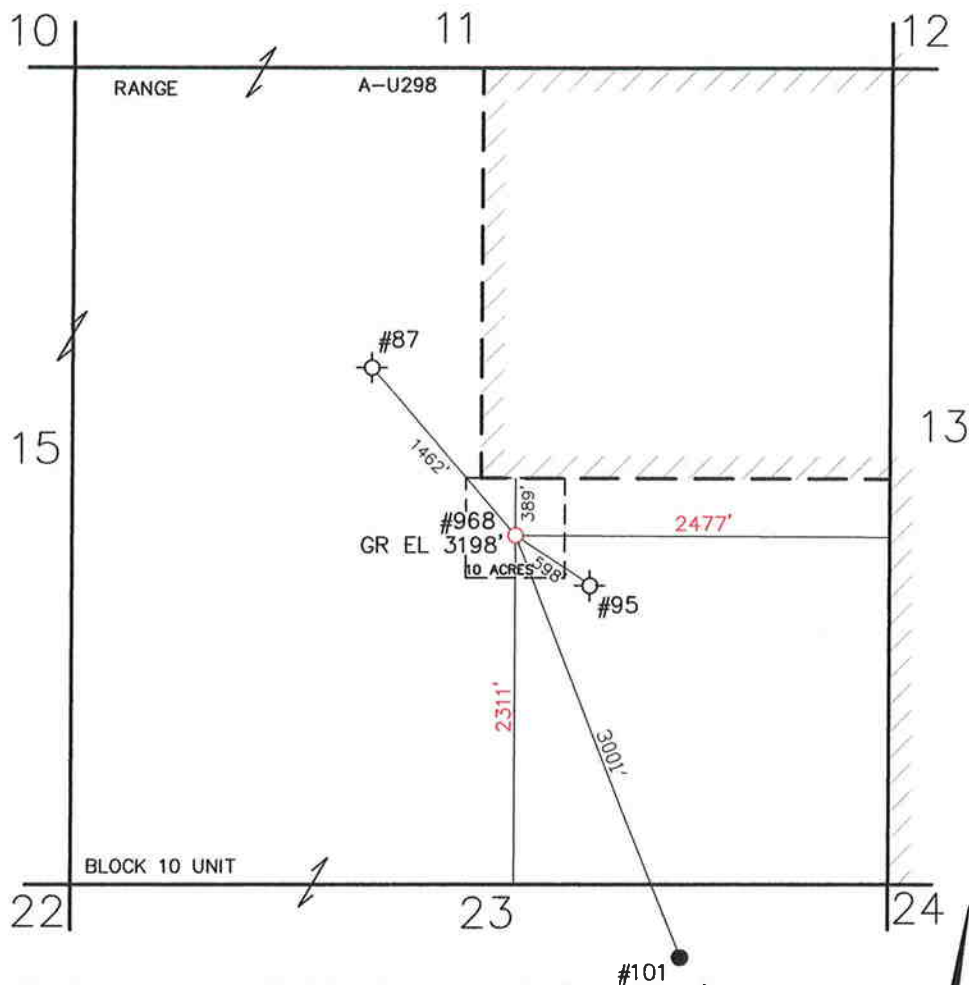
GEOLOGIST SEAL



Geologist, Surface Casing Team
Waste Permits Division

The seal appearing on this document was authorized by Jack M. Oswalt on 1/5/2009
Note: Alteration of this electronic document will invalidate the digital signature.

SECTION 14, BLOCK 10, UNIVERSITY LAND SURVEY



NOTE: THIS PERMIT PLAT HAS BEEN PREPARED FROM A CERTIFIED SURVEY PLAT ON FILE IN THE OFFICE OF WATSON PROFESSIONAL GROUP, MIDLAND, TEXAS.

NAD 83, TEXAS NORTH CENTRAL ZONE	
N=6771768.8', E=681044.1	LAT=32°10'26.6"N, LONG=102°39'42.8"W
NAD 27, TEXAS NORTH CENTRAL ZONE	
N=223777.1', E=403522.9'	LAT=32°10'26.2"N, LONG=102°39'41.2"W
APPROXIMATELY 13 MILES SW OF ANDREWS, TEXAS	
DISTANCE TO THE NEAREST LEASE LINE = 389' FNLL & 2477' FEL	

PERMIT PLAT
RANGE PRODUCTION COMPANY
BLOCK 10 FUHRMAN-MASCHO UNIT #968
2311' FSL & 2477' FEL
SECTION 14, BLOCK 10
UNIVERSITY LAND SURVEY
ANDREWS COUNTY, TEXAS

- △ WATER INJECTION WELL
- OIL WELL
- STAKED WELL
- ⊙ DRY HOLE
- ⊗ SHUT IN WELL



Watson Professional Group Inc.

4500 W. ILLINOIS
 SUITE 201 (79703)
 P.O. DRAWER 11186 (79702)
 MIDLAND, TEXAS
 PHN (432) 520-9200
 FAX (432) 520-9212
 gshoults@wpg-us.com



I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THE INFORMATION PRESENTED HEREON IS FOR THE PRIVATE USE OF THE PARTY NAMED IN THE "REFERENCE PORTION" OF THE TITLE BLOCK AND DOES NOT CONSTITUTE A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE "PROFESSIONAL LAND SURVEYING PRACTICES ACT."

Gregory W. Shoults
 REGISTERED PROFESSIONAL LAND SURVEYOR
 12/30/2008 5356
 DATE RPLS

DATE: DECEMBER 18, 2008 ACAD FILE: M:\DWG'S LOMAK\BLK10.dwg
 F/B: 588 DRAWN BY: GS WO# 08-1039-02 REVISED: 12/30/08

CONSULTING ENGINEERS, LAND SURVEYORS & PLANNERS