

Type or print only

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

U.T. LANDS

AUG 04 2009

Form W-2
Rev. 4/1/83
DBC1297

API No. 42- 461-36257				7. RRC District No. 7C	
Oil Well Potential Test, Completion or Recompletion Report, and Log					
1. FIELD NAME (as per RRC Records or Wildcat) SHEEP MOUNTAIN (CONSOLIDATED)		2. LEASE NAME UNIV3 VINCENT24		8. RRC Lease No. 16320	
3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report) COG OPERATING LLC		RRC Operator No. 166150		9. Well No. 2	
4. ADDRESS 550 WEST TEXAS AVENUE - SUITE 100 MIDLAND TX 79701				10. County of well site UPTON	
5. If Operator has changed within last 60 days, name former operator				11. Purpose of filing	
6a. Location (Section, Block, and Survey) SEC. 24, BLK. 3, UL				Initial Potential <input checked="" type="checkbox"/>	
6b. Distance and direction to nearest town in this county. 4.7 MILES NE FROM RANKIN				Retest <input type="checkbox"/>	
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.	
13. Type of electric or other log run COMPENSATED NEUTRON GAMMA RAY / CCL LOG		14. Completion or recompletion date 05/15/2009		Reclass <input type="checkbox"/>	
				Well record only (explain in Remarks) <input type="checkbox"/>	

SECTION 1: POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified in field rules.

15. Date of test 07/31/2009	16. No. of hours tested 24	17. Production method (Flowing, Gas Lift, Jetting, Pumping— Size & Type of pump) PUMP 2" X 1-1/4" X 20'		18. Choke Size
19. Production during Test Period	Oil - BBLS 87	Gas - MCF 128	Water - BBLS 89	Gas - Oil Ratio 1471.26
20. Calculated 24- Hour Rate	Oil - BBLS	Gas - MCF	Water - BBLS	Oil Gravity—API—60 ° 42.2
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) 1145			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

BY: _____

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.

ROY R. JOHNSON

Typed or printed name of operator's representative

REGULATORY SPECIALIST

Title of Person

(432) 818-2218
Telephone: Area Code Number08/04/2009
Date: mo. day year

Signature

24 Type of Completion:

DATA ON WELL COMPLETION AND LOG (Not Required on Re-test)

COG OPERATING LLC		26. Notice of intention to Drill this well was filed in Name of	
27. Number of producing wells on this lease in this field (reservoir) including this well		28. Total number of acres in this lease	
29. Date Plug Hack, Deepening, Work Over or Drilling Operations:		30. Distance to nearest well, Same Lease & Reservoir	
31. Location of well, relative to nearest lease boundaries or lease on which this well is located		32. Elevation (DF, RKB, RT, GR, ETC.)	
33. Top of Pay		34. P.B. Depth	
35. Total Depth		36. P.B. Depth	
37. Surface Casing		38. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No.	
39. Determined by:		40. Intervals Drilled by:	
41. Name of Drilling Contractor		42. Is Cementing Affidavit Attached?	
43. Is well multiple completion?		44. Intervals Drilled by:	
45. Name of Drilling Contractor		46. Intervals Drilled by:	
47. Name of Drilling Contractor		48. Intervals Drilled by:	
49. Name of Drilling Contractor		50. Intervals Drilled by:	
51. Name of Drilling Contractor		52. Intervals Drilled by:	
53. Name of Drilling Contractor		54. Intervals Drilled by:	
55. Name of Drilling Contractor		56. Intervals Drilled by:	
57. Name of Drilling Contractor		58. Intervals Drilled by:	
59. Name of Drilling Contractor		60. Intervals Drilled by:	
61. Name of Drilling Contractor		62. Intervals Drilled by:	
63. Name of Drilling Contractor		64. Intervals Drilled by:	
65. Name of Drilling Contractor		66. Intervals Drilled by:	
67. Name of Drilling Contractor		68. Intervals Drilled by:	
69. Name of Drilling Contractor		70. Intervals Drilled by:	
71. Name of Drilling Contractor		72. Intervals Drilled by:	
73. Name of Drilling Contractor		74. Intervals Drilled by:	
75. Name of Drilling Contractor		76. Intervals Drilled by:	
77. Name of Drilling Contractor		78. Intervals Drilled by:	
79. Name of Drilling Contractor		80. Intervals Drilled by:	
81. Name of Drilling Contractor		82. Intervals Drilled by:	
83. Name of Drilling Contractor		84. Intervals Drilled by:	
85. Name of Drilling Contractor		86. Intervals Drilled by:	
87. Name of Drilling Contractor		88. Intervals Drilled by:	
89. Name of Drilling Contractor		90. Intervals Drilled by:	
91. Name of Drilling Contractor		92. Intervals Drilled by:	
93. Name of Drilling Contractor		94. Intervals Drilled by:	
95. Name of Drilling Contractor		96. Intervals Drilled by:	
97. Name of Drilling Contractor		98. Intervals Drilled by:	
99. Name of Drilling Contractor		100. Intervals Drilled by:	

Block 3 University Land

S 88°49'22" E 5446.05

COG OPERATING LLC

(1566) (85)
5 13

(86)
14

4 24
(1565) (96)

23
(95)

N 172°36' E 5329.94

N 172°11' E 5329.36

166.825 Acres

Fnd. Conc. Mnt. (NE 3)

Univ3 Vincent24

667.3 Acres

3 25
(1564) (97)

S 88°49'43" E 5462.21

26
(98)

Note: Survey Reconstruction filed in the Office of Luchini and Mertz Land Surveying Company.

Note: All bearings and coordinates shown are based on the Texas Coordinate System of 1927, Central Zone.

A combined grid factor of 0.9997709 must be divided into Section Line distances to obtain a true horizontal distance.

Note: Example: (S-99999) indicates General Land Office file number.

Note: NAD '27 Coordinates & Latitude/Longitude on well location in Section 24.

Note: Well location is approximately 4.7 miles northeast of Rankin.

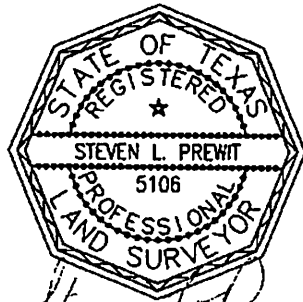
X: 1518532.56

Latitude - 31°15'31.727" N

Y: 582376.04

Longitude - 101°52'27.449" W

Railroad Commission Permit Plat

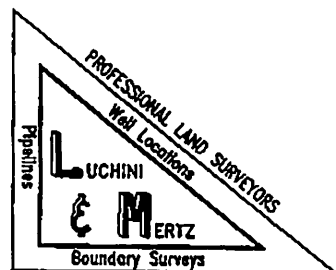


December 30, 2008

081230J1

COG OPERATING LLC
"Univ3 Vincent24" Lease
all of
Section 24, Block 3,
University Land,
Upton County, Texas

Scale: 1" = 1000'





Texas Commission
on Environmental Quality

Surface Casing Program

DEPTH OF USABLE-QUALITY GROUND WATER TO BE PROTECTED

Date February 6, 2009

TCEQ File No.: SC- 7664

API Number 46136257

Attention: ROY R JOHNSON

RRC Lease No. 000000

SC_166150_46136257_000000_7664.pdf

COG OPERATING LLC
550 W TEXAS AVE
STE 100
MIDLAND TX 79701

--Measured--

690 ft FWL

677 ft FNL

MRL: SURVEY

Digital Map Location:

X-coord/Long

Y-coord/Lat

Datum

Zone

P-5# 166150

County UPTON

Lease & Well No. UNIV3 VINCENT24 #2

Purpose ND

Location SUR-UL, BLK-3, SEC-24, --[TD=11000], [RRC 7C],

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

The interval from the land surface to 20 feet below the base of Cretaceous-age beds must be protected. The base of the Cretaceous is estimated to occur at a depth of 400 feet.

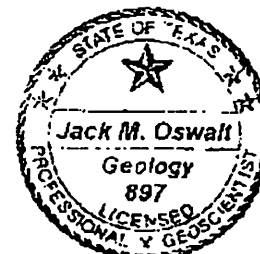
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Approval of the well completion methods for protection of this groundwater falls under the jurisdiction of the Railroad Commission of Texas. This recommendation is intended for 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: cn=US, st=Texas, o=Austin, ou=Surface
Casing, ou=Texas Commission on
Environmental Quality, cn=Jack M. Oswalt,
email=j.oswalt@tceq.state.tx.us
Date: 2009.02.06 07:22:10 -0600

GEOLOGIST SEAL



Jack M. Oswalt, P.G.

Geologist, Surface Casing Team
Waste Permits Division

The seal appearing on this document was authorized by Jack M. Oswalt on 2/6/2009.
Note: Alteration of this electronic document will invalidate the digital signature.

RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION

Form W-12
DBC1297 (1-1-71)

INCLINATION REPORT (One Copy Must Be Filed With Each Completion Report.)		6. RRC District 7C
1. FIELD NAME (as per RRC Records or Wildcat) SHEEP MOUNTAIN (CONSOLIDATED)	2. LEASE NAME UNIV3VINCENT24	7. RRC Lease Number, (Oil completions only) 16320
3. OPERATOR COG OPERATING, LLC		8. Well Number 2
4. ADDRESS 550 WEST TEXAS BLVD., SUITE 100 MIDLAND, TEXAS 79701		9. RRC Identification Number (Gas completions only)
5. LOCATION (Section, Block, and Survey) SEC. 24, BLK. 3, ULS		10. County UPTON

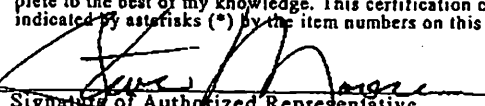
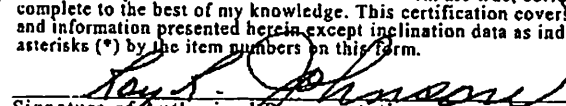
RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
220	2.20	.03	0.05	0.11	0.11
485	2.65	.50	0.87	2.31	2.42
935	4.50	.40	0.70	3.15	5.57
1410	4.75	.50	0.87	4.13	9.70
1885	4.75	.90	1.57	7.46	17.16
2367	4.82	.40	0.70	3.37	20.53
2809	4.42	.30	0.52	2.30	22.83
3224	4.15	.10	0.17	0.71	23.54
3700	4.76	.50	0.87	4.14	27.68
4113	4.13	.20	0.35	1.45	29.13
4588	4.75	.20	0.35	1.66	30.79
5036	4.48	.20	0.35	1.57	32.36
5447	4.11	.60	1.05	4.32	36.68
5924	4.77	.50	0.87	4.15	40.83
6304	3.80	.30	0.52	1.98	42.81
6749	4.45	.90	1.57	6.99	49.80

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 10815.00 feet = 125.14 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 677 feet.
21. Minimum distance to lease line as prescribed by field rules 467 feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? NO

(If the answer to the above question is "yes", attach written explanation of the circumstances.)

INCLINATION DATA CERTIFICATION	OPERATOR CERTIFICATION
<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 sides 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> Signature of Authorized Representative STEVE MOORE, ADMINISTRATOR Name of Person and Title (type or print) PATTERSON - UTI DRILLING COMPANY, LLC Name of Company Telephone: <u>(432) 682-9401</u> Area Code</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 presented on both sides of this form 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> Signature of Authorized Representative ROY K. JOHNSON - REGULATORY SPECIALIST Name of Person and Title (type or print) COG OPERATING LLC Operator Telephone: <u>432-818-2218</u> Area Code</p>

Railroad Commission Use Only:

Approved By: _____ Title: _____ Date: _____

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

RECORD OF INCLINATION (Continued from reverse side)

[illegible]

If additional space is needed, attach separate sheet and check here. ☐

REMARKS:

- INSTRUCTIONS -

An inclination survey made by persons or concerns approved by the Commission shall be filed on a form prescribed by the Commission for each well drilled or deepened with rotary tools or when, as a result of any operation, the course of the well is changed. No inclination survey is required on wells that are drilled and completed as dry holes that are plugged and abandoned. (Inclination surveys are required on re-entry of abandoned wells.) Inclination surveys must be made in accordance with the provisions of Statewide Rule 11.

This report shall be filed in the District Office of the Commission for the district in which the well is drilled, by attaching one copy to each appropriate completion for the well. (except Plugging Report)

The Commission may require the submittal of the original charts, graphs, or discs, resulting from the surveys.

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

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

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

1. Operator's Name (As shown on Form P-5, Organization Report) COG Operating LLC		2. RRC Operator No. 166150	3. RRC District No. 7C	4. County of Well Site Upton
5. Field Name (Wildcat or exactly as shown on RRC Records) SHEEP MOUNTAIN (CONSOLIDATED)			6. API No. 42-461-36257	7. Drilling Permit No. 677098
8. Lease Name UNIV3 VINCENT24		9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 16320	11. Well No. #2

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		3-23-09					
13. • Drilled Hole Size		12-1/4					
• Est. % wash or hole enlargement		---					
14. Size of casing (in. O.D.)		9-5/8					
15. Top of liner (ft.)		---					
16. Setting depth (ft.)		530					
17. Number of centralizers used		5					
18. Hrs. Waiting on cement before drill-out		14					
1 st Slurry	19. API cement used: No. of sacks ▶	315					
	Class ▶	C					
	Additives ▶	2% CACL2-125 #SKCELLO					
2 nd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	425					
	Height (ft.) ▶	1362					
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	425					
	Height (ft.) ▶	1362					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		YES					
(22).Remarks #1 Circulated 108 sacks to surface							

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) COG Operating LLC		2. RRC Operator No. 166150	3. RRC District No. 7C	4. County of Well Site Upton
5. Field Name (Wildcat or exactly as shown on RRC Records) SHEEP MOUNTAIN (CONSOLIDATED)			6. API No. ----- 42-461-36257	7. Drilling Permit No. 677098
8. Lease Name UNIV3 VINCENT24		9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 16320	11. Well No. 2

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				4/4/09			
13. • Drilled Hole Size				7-7/8			
• Est. % wash or hole enlargement				----			
14. Size of casing (in. O.D.)				5-1/2			
15. Top of liner (ft.)				----			
16. Setting depth (ft.)				10800			
17. Number of centralizers used				33			
18. Hrs. Waiting on cement before drill-out				120			
1 st Slurry	19. API cement used: No. of sacks			890			
	Class			Class H			
	Additives			Remaker			
2 nd Slurry	No. of sacks						
	Class						
	Additives						
3 rd Slurry	No. of sacks						
	Class						
	Additives						
1 st	20. Slurry pumped: Volume (cu. ft.)			1121.4			
	Height (ft.)			648			
2 nd	Volume (cu. ft.)						
	Height (ft.)						
3 rd	Volume (cu. ft.)						
	Height (ft.)						
Total	Volume (cu. ft.)			1121.4			
	Height (ft.)			648			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				NO			
Remark 1 -- H (50:50:2) + 2/10% FL-52A + .25% Salt							