

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACD-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

ORIGINAL

Operator: License # 32119

Name: Northern Natural Gas

Address P.O. Box 178

City/State/Zip Cunningham, KS 67035

Purchaser: n/a

Operator Contact Person: Dan Dobbins

Phone (316) 298-6117

Contractor: Name: Pratt Well Service

License: 5893

Wellsite Geologist: none

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD SLOW Temp. Abd.

Gas ENHR SIGW

Dry Other (Core, WSW, Expl., Cathodic, etc)
GAS STORAGE WELL

If Workovers:

Operator: Northern Natural Gas

Well Name: Maxedon 25-24

Comp. Date 6/2/78 Old Total Depth 4078 TVD

Deepening Re-perf. Conv. to Inj/SWD

Plug Back PBDT

Commingled Docket No. _____

Dual Completion Docket No. _____

Other (SWD or Inj?) Docket No. _____

8/18/98 10/15/98 10/23/98

Spud Date Date Reached TD Completion Date

API NO. 15- 151-204670101

County Pratt

NE - SE - NE - Sec. 25 Twp. 27S Rge. 11 X W

1450 Feet from S (N) (circle one) Line of Section

370 Feet from (E/W) (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
(NE) SE, NW or SW (circle one)

Lease Name Maxedon Well # 25-24

Field Name Cunningham

Producing Formation Viola

Elevation: Ground 1690 KB 1703

Total Depth 4879 4031 TVD PBDT 4879 4031 TVD

Amount of Surface Pipe Set and Cemented at 1403 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan OWWD 12-8-98 JK
(Data must be collected from the Reserve Pit)

Chloride content 800 ppm Fluid volume 400 bbls

Dewatering method used n/a

Location of fluid disposal if hauled offsite:

Operator Name Geary Mud Disposal

Lease Name Gray License No. 284168

Quarter 15 Sec. 14N Twp. 7 S Rng. W E/W

County Garfield, OK Docket No. 284168

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Dan Dobbins

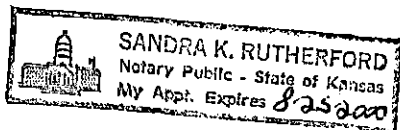
Title Sr. Reservoir Analyst Date 12/4/98

Subscribed and sworn to before me this 4th day of December, 1998.

Notary Public Sandra K. Rutherford

Date Commission Expires 6-25-2000

K.C.C. OFFICE USE ONLY		
F	<input type="checkbox"/>	Letter of Confidentiality Attached
C	<input type="checkbox"/>	Wireline Log Received
C	<input type="checkbox"/>	Geologist Report Received
Distribution		
<input checked="" type="checkbox"/>	KCC	<input type="checkbox"/> SWD/Rep <input type="checkbox"/> NGPA
<input type="checkbox"/>	KGS	<input type="checkbox"/> Plug <input type="checkbox"/> Other (Specify)



STATE CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
Wichita, Kansas
DEC - 7 1998

Operator Name Northern Natural Gas Lease Name Maxedon Well # 25-24
 Sec. 25 Twp. 27SRge. 11 East West
 County Pratt

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run (Submit Copy.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
List All E.Logs Run:				

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Conductor	20"	13 3/8"	48	99'	Common	150	-----
Surface	12 1/4"	8 5/8"	22	1403'	50-50 Poz	650	1/4# Flocele 3% CC
Production	7 7/8"	5 1/2"	15 1/2	4289'	50-50 Poz	850	18% Salt .75% CFR2

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose: Set Liner	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	3462-4414	Standard	25	

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth	

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SMD or Inj. Storage Well		Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)				
Estimated Production Per 24 Hours	n/a	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas: **METHOD OF COMPLETION** **Production Interval**

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled _____
 (If vented, submit ACO-18.) Other (Specify) _____



Job Number: P98-118
 Company: Netherland, Sewell & Associates, Inc.
 Lease/Well: 25-24D Maxedon
 Location: Cunningham Gas Storage Field
 Rig Name: Pratt Well Services
 RKB: 1703'
 G.L. or M.S.L.: 1690'

State/Country: Platt/Kingman Counties, Kansas
 Declination: 6.56° East (est.)
 Grid: Assumed True
 File name: D:\98110\SP98118\MAX2524D.SVY
 Date/Time: 15-Sep-98 / 00:38
 Curve Name: Diamondback Surveys

RECEIVED
 STATE CORPORATION COMMISSION
 DEC - 7 1998
 CONSERVATION DIVISION
 Wichita, Kansas

Phoenix Drilling Services, Inc.

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 129.58
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

ORIGINAL

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
Interpolated from Single Shot Survey									
3798.00	31.25	129.00	3686.70	-509.08	424.83	651.80	663.06	140.15	.00
3812.00	35.70	152.00	3698.42	-515.00	429.60	659.24	670.65	140.17	95.46
3844.00	40.80	132.30	3723.63	-530.35	441.77	678.40	690.23	140.21	41.14
3875.00	40.90	129.50	3747.08	-543.62	457.09	698.66	710.25	139.94	5.92
3906.00	41.20	129.90	3770.46	-556.62	472.75	719.02	730.29	139.66	1.29
3938.00	44.00	131.00	3794.02	-570.68	489.23	740.68	751.68	139.39	9.05
3969.00	46.10	130.20	3815.92	-584.95	505.89	762.61	773.36	139.15	7.02
4001.00	47.40	129.30	3837.84	-599.85	523.81	785.92	796.37	138.87	4.55
4026.00	57.70	130.70	3853.02	-612.61	538.98	805.74	815.96	138.66	41.44
4032.00	49.10	129.10	3856.60	-615.70	542.67	810.55	820.71	138.61	144.92

DEC 7 1996

CONSERVATION DIVISION
Wichita, Kansas

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4064.00	52.90	129.00	3876.73	-631.36	561.98	835.41	845.24	138.33	11.88
4095.00	57.90	130.50	3894.33	-647.68	581.58	860.92	870.48	138.08	16.61
4157.00	59.30	130.20	3926.63	-681.94	621.91	913.83	922.94	137.64	2.30
4188.00	61.50	129.50	3941.94	-699.21	642.61	940.79	949.65	137.42	7.36
4219.00	62.40	129.80	3956.52	-716.67	663.67	968.14	976.77	137.20	3.03
4250.00	65.00	128.90	3970.26	-734.28	685.16	995.93	1004.30	136.98	8.78
4281.00	69.10	129.80	3982.34	-752.38	707.23	1024.47	1032.60	136.77	13.49
4312.00	74.50	128.50	3992.02	-770.96	730.06	1053.91	1061.78	136.56	17.87
4344.00	80.70	126.60	3998.89	-790.00	754.83	1085.13	1092.64	136.30	20.22
4375.00	82.80	126.40	4003.34	-808.24	779.49	1115.76	1122.88	136.04	6.80
4407.00	83.80	125.00	4007.07	-826.79	805.30	1147.47	1154.16	135.75	5.35
4438.00	84.90	124.00	4010.12	-844.26	830.72	1178.19	1184.43	135.46	4.78
4470.00	84.80	124.10	4012.99	-862.11	857.13	1209.92	1215.69	135.17	.44
4502.00	86.20	124.30	4015.51	-880.04	883.51	1241.68	1247.02	134.89	4.42
4533.00	88.30	124.10	4016.99	-897.44	909.12	1272.50	1277.46	134.63	6.80
4565.00	88.20	124.30	4017.97	-915.42	935.58	1304.35	1308.93	134.38	.70
4596.00	88.80	124.80	4018.78	-932.99	961.10	1335.22	1339.47	134.15	2.52
4628.00	88.60	124.60	4019.51	-951.21	987.40	1367.09	1371.04	133.93	.88
4659.00	86.80	123.30	4020.75	-968.50	1013.09	1397.91	1401.56	133.71	7.16
4690.00	86.50	123.30	4022.56	-985.49	1038.96	1428.68	1432.00	133.49	.97
4721.00	86.50	123.30	4024.46	-1002.48	1064.82	1459.43	1462.47	133.27	.00
4752.00	87.00	123.80	4026.21	-1019.59	1090.62	1490.21	1492.98	133.07	2.28
4784.00	86.70	123.80	4027.97	-1037.36	1117.17	1522.00	1524.53	132.88	.94
4815.00	87.70	124.40	4029.49	-1054.72	1142.81	1552.82	1555.13	132.70	3.76
4847.00	89.10	124.40	4030.38	-1072.79	1169.20	1584.68	1586.79	132.54	4.37
4879.00	88.90	124.60	4030.94	-1090.91	1195.57	1616.55	1618.48	132.38	.88
4910.00	88.90	123.80	4031.53	-1108.34	1221.20	1647.40	1649.16	132.23	2.58
4942.00	89.30	123.40	4032.04	-1126.04	1247.85	1679.23	1680.80	132.06	1.77
4973.00	88.80	123.40	4032.55	-1143.10	1273.73	1710.04	1711.45	131.91	1.61
4991.00	87.90	123.40	4033.07	-1153.01	1288.75	1727.93	1729.25	131.82	5.00

ORIGINAL

Projected Survey to TD									
5023.00	87.90	123.40	4034.24	-1170.61	1315.45	1759.72	1760.89	131.67	.00