Form 3160-4 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR OMB NO. 1004-0137 **BUREAU OF LAND MANAGEMENT** Expires: January 31, 2004 WELL COMPLETION OR RECOMPLETION REPORT AND LOG 5. Lease Serial No. LC-049945-B 1a. Type of Well Oil Well X Gas Well Dry Other b. Type of Completion: X New Well Plug Back Diff. Resvr., 6. If Indian, Allottee or Tribe Name Work Ove 2. Name of Operator 7. Unit or CA Agreement Name and No Yates Drilling Company 3a. Phone No. (include area code) 8. Lease Name and Well No. 105 S. 4th Str., Artesia, NM 88210 505-748-8463 Parrot Federal Com #2 4. Location of Well (Report location clearly and in accordance with Federal requirements)* 30-015-33345 1600' FSL & 660' FEL At Surface

At top prod. Interval reported below AHTERIA 29-19S-27E At total depth NM Eddy 14. Date Spudded 15. Date T.D.Reached 16. Date Completed 10/5/2004 17. Elevations (DF,RKB,RT,GL)* 7/12/2004 D&A X Ready to Prod. 5/29/2004 3413' GL 18. Total Depth: MD 10'677 19. Plug Back T.D.: MD 8325' 20. Depth Bridge Plug Set: MD 8360 TVD TVD TVD X No 22 Was Well cored? (Submit analysis) 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) Was DST run? (Submit report) CSNG/DSN/SDL, DLL/MGRD, SSS/RSCT X No Directional Survey? (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

					State Cementer	No. of Sks &	Slurry Vol.		
Hole Size	Size/Grade	Wt.(#/ft.)	Top (MD)	Bottm(MD)	Depth	Type of Cement	(BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	surf	430'		475 "C"	183	circ	none
12 1/4"	9 5/8"	36#	surf	2820'		900 "C"	521	circ	none
8 3/4"	7"	26 & 23#	surf	8205'		800 "C"	581	circ	none
6 1/8"	4 1/2"	11.6#	7983'	10677'		275 "C"	73	7983'	none
								Ì	

Depth Set (MD)

Packer Depth (MD)

Amount and Type of Material

Size

Depth Set (MD)

Packer Depth (MD)

24. Tubing Record Size

2 3/8"	7920'	7920'				[
25 . Produci	ng Intervals		26. Perforation Recor	26. Perforation Record					
	Formation	Тор	Bottom	Perforated Interval	Size	No. Holes	Perf. Status		
A) Wolfcam	ıp	8074'	8222'	10186'-10222'	.43"	72	plugged		
3)	•			10094'-10126'	.43"	128	plugged		
C)			•	8382'-8398'	.43"	64	plugged		
D)				8074'-8158'	.48"	467	producing		

Size

27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval

SI

Depth Set (MD)

Packer Depth (MD)

 \Rightarrow

	pur interval		Amount and Type of Material								
10186'-10222'	(plugged)		Acidized w/ 2000 gals 7 1/2" NEFE acid w/ N2,Frac'd w/ 40,980# 20/40 Interprop w/4838 SCF N2, 90								
			tons CO2								
10094'-10126'	(plugged)		Acidized w/ 3500 gals 7 1/2% HCL w/ 700 gals methanol								
8382'-8398' (p	lugged)		Acidized 4000 gals 2	20% HCL							
28. Production -	Interval A										
Date First	Test	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method		
Produced	Date	Tested	Production	BBL	MCF	BBL	Corr. API	Gravity			
10/6/2004 •	10/18/2004	24	⇔	183.39	970	0			Flowing		
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas: Oil	Well Statu	ıs		
Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio				
12/64	2100		➡	183.39	970	0	528/1	flowing			
28a. Production-	Interval B			•		•					
Date First	Test	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method		
Produced	Date	Tested	Production	BBL	MCF	BBL	Corr. API	Gravity			
			⇒								
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas: Oil	Well Statu	ıs		
Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio				

8b. Production	- Interval C			-		•				
Date First	Test	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method	
Produced	Date	Tested	Production	n BBL	MCF	BBL	Corr. API	Gravity		
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas: Oil	Well Statu	is	
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Ratio			
c. Production	, , ,			1 0"	- 10	Day 4	011.0		ID1	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas: Oil	Well Statu	is .	
Size	Flwg. Sl	Press.	Rate	BBL	MCF	BBL	Ratio			
Disposition	of Gas (Sold, u	ised for fuel,	vented, etc.)			<u> </u>				
	Porous Zones	(Include Aqu	uifers):					31. Forma	ition (Log) Markers	
			f contents ther on used, time to							
	ormation		Тор	Bottom	Descr	iption, Co	ntents, etc.		Name	Top Meas Depth
									Queen	828'
									Grayburg	1124'
									San Andres	1682'
								Во	ne Spring Lime	2724'
								15	st Bone Spring	5352'
		ļ						3r	d Bone Spring	7364'
									Wolfcamp	7764'
									Disco-Canyon	8348'
									Strawn	9024'
								ł	Atoka	9592'
		ļ						1	Morrow	9886'
								М	orrow Clastics	10034'
								.	ower Morrow	10162'
	emarks (include Formation M	•	ocedure):							
arnett/Austin		idi KCi 5	10342'							
hester	O yolo		10534'							
D			10725'							
	sed attachment			20:1:	- Da:: :		2 DOT 2			
	Mechanical Log			2. Geologi 6. Core An	-		3. DST Report 7. Other:	4. Dire	ctional Survey	
. I hereby cer	tify that the fore	egoing and at	tached informa	tion is complet	e and corre	ect as dete	ermined from a	l available i	records (see attached	i instructions)*
ame(please p	rint) <u>Kare</u>	n J. Leish	man					Title	Engine	eering Tech
gnature	`_	1/2.		Lush				Date	40	20/2004

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any talse, fictitious or traudulent statements or representations as to any matter within its jurisdiction.

YATES DRILLING

WELL/LEASE:

PARROT FED COM #2

COUNTY:

EDDY, NM

STATE OF NEW MEXICO DEVIATION REPORT

	,		- ***	
186	1/2	5,873	3/4	
401	1 1/4	6,124	1	
647	1 1/2	6,378	3/4	
894	1 1/2	6,631	2 1/4	
1,116	1 1/2	6,758	1 1/2	
1,401	1 1/2	6,885	1 1/2	
1,655	3/4	7,012	1 1/2	
1,908	3/4	7,139	2 1/4	
2,163	3/4	7,266	3	
2,416	1/2	7,329	2 3/4	
3,050	1	7,392	2 1/4	
3,273	1	7,518	2 3/4	
3,525	1	7,652	2 3/4	
3,775	1 1/4	7,778	2 1/4	
4,033	2 1/4	7,906	2 1/2	
4,128	2 1/4	8,033	2 1/4	
4,223	2 3/4	8,162	2 1/2	
4,325	2 1/4	8,254	2 3/4	
4,413	2 3/4	8,388	3 1/4	
4,509	2 3/4	8,513	1	
4,603	2 3/4	8,640	1 1/2	
4,699	2 1/2	8,766	1	
4,795	2 1/2	8,891	1 1/2	
4,891	1 3/4	9,145	1 1/2	
4,986	1 3/4	9,385	1 3/4	
5,113	2	9,642	1 1/2	
5,240	1 3/4	9,903	1 1/2	
5,365	1 3/4	10,188	3/4	
5,492	1 3/4	10,430	1	
5,619	2	10,688	1	
5,746	1 1/2			

STATE OF TEXAS
COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 14th day of July, 2004, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

Notary Public for Midland County, Texas

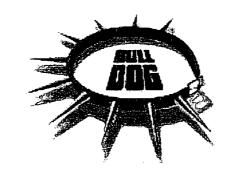
My Commission Expires: 8/23/2007



J ROBERTSON

512-5062

Notary Public, State of Texas My Commission Expires: August 23, 2007



BULLDOG TESTERS

Jal, New Mexico (505) 390-3070

> RECEIVE -OCT 2 2 2004 OCUMANIES!

Operator:

Yates Drilling Co.

Well Name:

Parrot Federal Com #2

Dst Number:

Date of Test:

06/24/2004

Date of Report: 06/25/2004

WELL TEST REPORT

BULLDOG TESTERS

WELL TEST REPORT

Phone: (432) 756-5551 Cell: (505) 390-3070 **Technical Services** (928) 505-8389

Well Owner:

Yates Drilling Co.

Test Interval:

8078'-8127'

Well Name & Number:

Parrot Federal Com # 2

Field:

Wildcat Chester

Location:

S-29 T-19S R-27E

County:

Eddy

Test Number:

1

State:

New Mexico

Service Order Number: 9017 Bulldog Technician:

Mark Luna

TE	TOOL SEQUENCE								
Description	Date	Time	Pressure	Mcf/D	Component	OD (in)	ID (in)	Length (ft)	Depth (ft)
Set Packers	06/24/04	06:18			Drillpipe	4.50	3.826	7327.30	
Start flow on 1/8" choke		06:19	1.		Drillcollars	6.25	2.25	612.79	
		06:24	6.0*		Circulating Sub	6.00	2.25	1.00	
End flow - Start shut-in		06:34	12"		Drillcollars	6.25	2.25	93.00	
End shut-in		07:04	0.0		X-Over	6.00	2.25	1.00	
Start flow on 1/8" choke		07:04	4.5*		Recorder	5.00	1.12	3.00	8035
		07:08	12*		Shut-in/Sampler	5.00	0.68	9.20	8038
		07:14	17.5 oz		Hydraulic Tool	5.00	1.18	5.21	
Open to 1/4° choke		07:24	4.0 psi		Recorder	5.00	1.12	5.69	8052
		07:34	20.0		Jars	5.00	1.87	7.68	
		07:39	30.0		Packer	8.00	1.50	6.22	8072
Gas to surface		07:44	36.0	67.6	Packer	8.00	1.50	6.22	8078
		07:54	52.0	91.1	Perfs	5.00	3.00	(
Open to 3/8" choke		08:09	70.0	253.0	X-Over	6.00	2.25)	
		08:24	60.0	219.0	Drillcollars	6.25	2.25	(
		08:44	66.0	239.0	X-Over	6.00	2.25)	
		09:04	74.0	266.0	Perfs	5.00	3.00	(
		09:24	74.0	266.0	Recorder	5.00	1.12	49	8127 (TD)
		09:44	75.0	270.0					
		10:04	76.0	273.0					
End flow - Start shut-in		10:34	76.0	273.0			T		
End shut-in		17:34	0.0						
Pulled tool		17:35							
							İ	1	



BULLDOG TESTERS

WELL TEST REPORT

Phone: (432) 756-5551 Celt: (505) 390-3070 **Technical Services** (928) 505-8389

Well Owner:

Yates Drilling Co.

Test Interval:

8078'-8127'

Well Name & Number:

Parrot Federal Com #2

Field:

Wildcat Chester

Location:

S-29 T-19S R-27E

County:

Eddy

Test Number:

Service Order Number:

9017

State:

New Mexico

Bulldog Technician:

Mark Luna

INSTRUMENT DATA

WELL DATA

Instrument Number:	Spartek 76134	Spartek 71067	Mechanical	Mud Type: Gel	Mud Wt.: 10.2
Capacity (psig)	10000	10000	6450	Viscosity:	Water Loss:
Depth (ft)	8052	8035	8122	Resistivity of Mud:	0.058 @ 70 deg f
Inside / Outside	Inside	Inside / Above	Outside	Resistivity of Filtrate:	
Clock Capacity:	Elec	Elec		Chlorides:	145,000
Temperature (f)	139.8			H2S During Test:	None
Initial Hydrostatic:	4334			Formation:	Wolfcamp
Pre-Flow:	1010 - 1121	No		Tested Interval:	8078'- 8127'
Initial Shut-in:	4106	Leaks		Elevation:	3408 GL
2nd Flow:				Total Measured Depth:	8127
2nd Shut-in:				Open Hole Size:	8 3/4*
Final Flow:	1187 - 1277	No		Casing Size:	9 5/8"
Final Shut-in:	4212	Leaks		Cushion:	None
Final Hydrostatic:	4330			Bottom Choke Size:	5/8*

PIPE RECOVERY

Ran 988' water cushion = 7.45 bbi.

1707' Total fluid = 17.67 bbl., consisting of:

719 Oil = 10.22 bbl. (gravity: 46.0 deg API @ 60 deg f)

988' Water cushion = 7.45 bbl. (rw: 17.74 @ 70 deg f/300 ppm Cl.)

SAMPLER REPORT

Total Volume of Sample:

CC

Pressure in Sampler:

1276

Psi

Gas:

4,44

1500

Cu.Ft.

Gravity:

46.0 deg API @ 60 deg f

Oil:

700 0

CC CC

Resistivity:

Water: Mud:

0

CC

Resistivity:

Yates Drilling Co.
Parrot Federal Com #2, Dst #1

Comments relative to analysis of the drill stem test that was run in the Wolfcamp formation by Bulldog Testers.

This analysis is based upon the liquid recovery and equations applicable to liquid recovery tests; radial flow analysis and derivative analysis techniques. It has been assumed, for purposes of this analysis that the tested reservoir system consisted of a single porosity zone 45 feet in thickness with an average porosity of 15 percent. The diagnostic plot indicates constantly decreasing derivative pressures. This type of flow regime is generally associated with either the presence of a constant pressure boundary and/or that the tested reservoir system was only partially penetrated. Therefore, a vertical oil-well model with spherical flow characteristics was used for type-curve matching and non-linear regression analysis.

The semi-log plots indicate a maximum initial reservoir pressure of 4251 psi and a maximum final reservoir pressure of 4247 psi, which is equivalent to a subsurface pressure gradient of 0.527 psi/ft at gauge depth. This pressure gradient is somewhat high compared to "normal" reservoir pressures which are generally 0.36 psi/ft to 0.41 psi/ft.

The Average Production Rate which was used in this analysis has been calculated from analysis of the flow pressure curves using a liquid gradient for the recovered oil of 0.345 psi/ft.

The calculated Skin Factors indicate significant well-bore damage was present at the time of this formation test.

The evaluation criteria used in the drill stem test analysis system indicate this is a good mechanical test and the results obtained in this analysis should be reliable within reasonable limits relative to the assumptions which have been made.

Michael Hudson Analyst (928) 505-8389



Vertical Oil Well Model

Yates Drilling Co
Parrot Federal Com 2, Dst 1
Gauge 76134

Model Parameters

Cil Permeability (k ₀)	0.308 md	Total Mobility (k/μ) _t	2.11 md/cp
Gas Permeability (kg)	0.026 md	Total Transmissivity (kh/µ)ţ	95.13 md.ft/cp
		Skin (s)	4.635

Formation Parameters

Net Pay (h) 45.000 ft 15.00% Total Porosity (φ_t) Oil Saturation (So) 80.00% Gas Saturation (Sq) 0.00% Water Saturation (Sw) 20.00% Wellbore Radius (rw) 0.36ft Formation Temperature (T) 139.8°F 4.109e-6 psi-1 Formation Compressibility (c_f) 1.999e-5 psi⁻¹ Total Compressibility (c_t) Wellbore Storage Constant Dim. (CD) 3.86

Fluid Properties

Oil Compressibility (c _O)	1.91576e-5 psi ⁻¹
Gas Compressibility (c _g)	1.52775e-4 psi ⁻¹
Water Compressibility (c _w)	2.79207e-6 psi ⁻¹
Oil Formation Volume Factor (B _O)	1.761
Gas Formation Volume Factor (Bg)	0.000645 bbl/scf
Water Formation Volume Factor (B _W)	1.003
Oil Viscosity (µ ₀)	0.294 cp
Gas Viscosity (µg)	0.0242 cp
Water Viscosity (µw)	0.466 cp
Solution Gas Ratio (R _S)	1472 scf/bbl
Oil Gravity (y ₀)	46.00 ° API
Gas Gravity (G)	0.650
PVT Reference Pressure (ppVT)	4251.06 psi
Bubble Point Pressure (P _{bp})	4251.06 psi
FaskBaktBd9017 FKT 01, Jul-04 Vor 4 107	

Production and Pressure

Q_tB_t	228.196 bbl/d
Final Oil Rate	64.230 bbl/d
Final Gas Rate	0.273 MMCF/D
Final Flowing Pressure (PWfO)	1278.93 psi
Final Measured Pressure	4211.81 psi
Cumulative Oil Production During Test	10.064 bbl

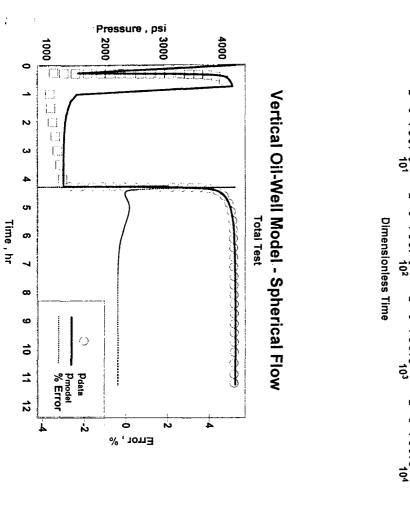
Synthesis Results

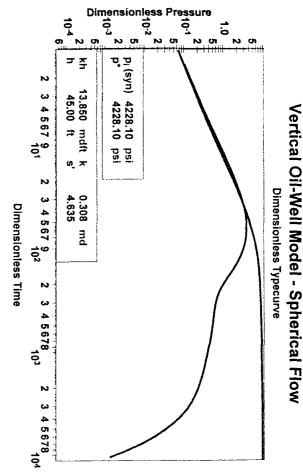
Average Error	0.22%
Synthetic Initial Pressure (p _i)	4228.10 psi
Extrapolated Pressure at Specified Time	4228.10 psi
Pressure Drop Due To Skin (△p _S)	1570.04 psi
Flow Efficiency (FE)	0.468
Damage Ratio (DR)	2.138

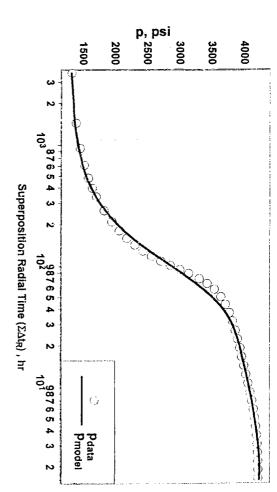
Forecasts

Forecast Flowing Pressure (Pflow)	1278.93 psi
3 - Month Constant Rate Forecast @ Curr. Skin	64.189 bbl/d
6 - Month Constant Rate Forecast @ Curr. Skin	64.189 bbl/d
Forecast Flow Duration (t _{flow})	12.00 month
Constant Rate Forecast @ Curr. Skin	64.189 bbl/d
PI / II (Total Liquids - Actual)	0.022 bbl/d/psi
Constant Rate Forecast @ Skin=0	137.166 bbl/d
PI / II (Total Liquids - Ideal)	0.047 bbl/d/psi
Constant Rate Forecast @ Skin=-4	1621.367 bbi/d
	ast

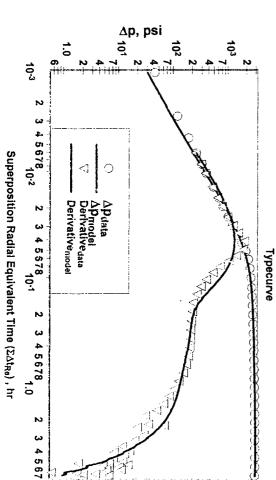
C:\Fast\FaskBak\Bd9017.FKT 01-Jul-04 Ver 4.107



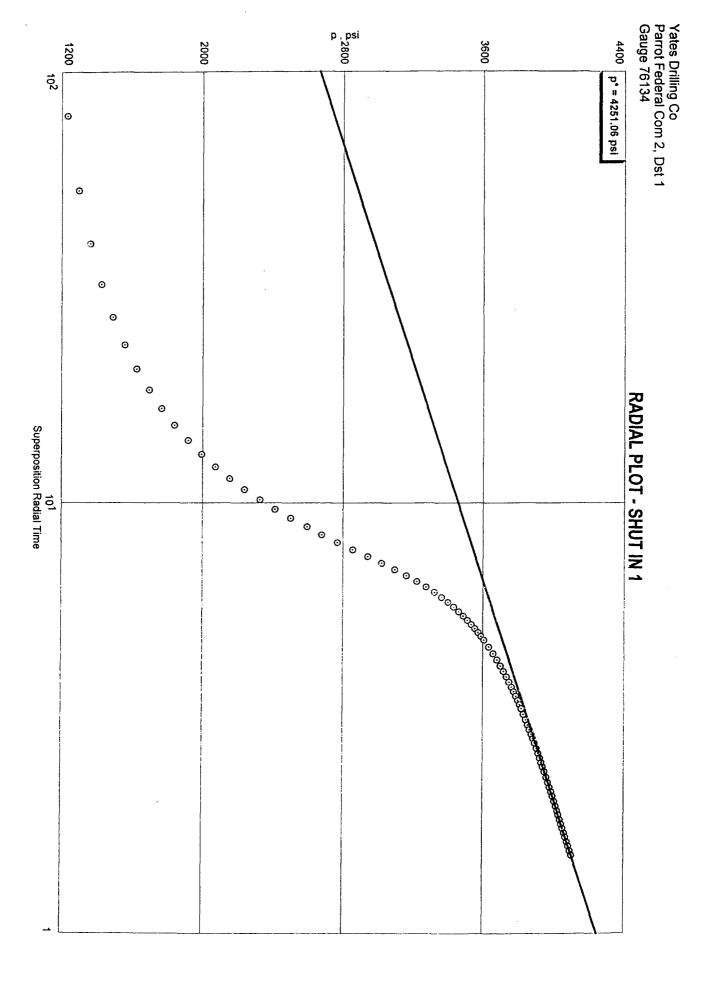


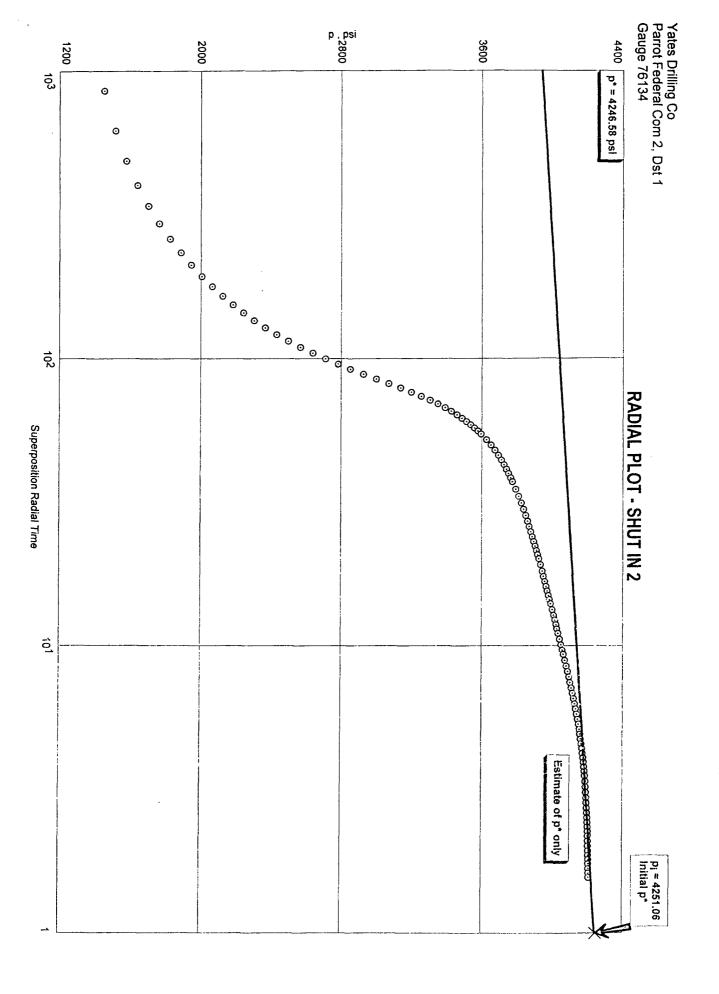


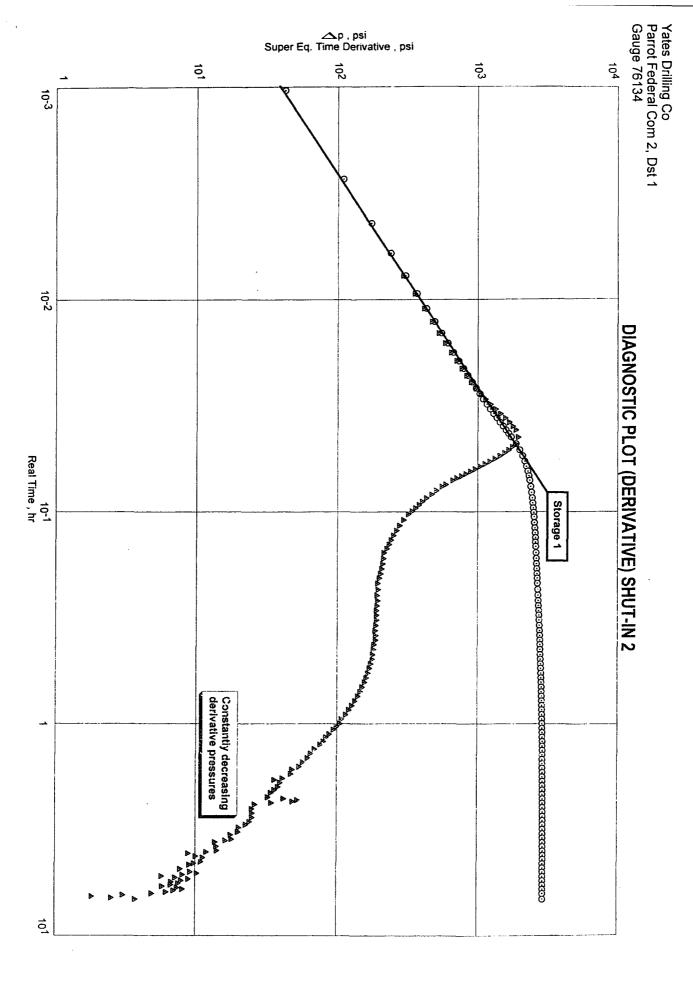
Vertical Oil-Well Model - Spherical Flow



Vertical Oil-Well Model - Spherical Flow



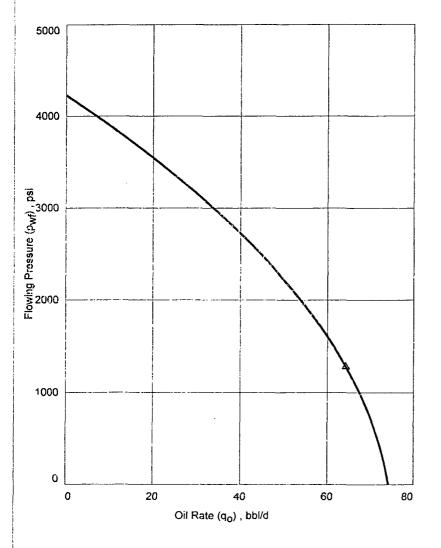




Inflow Performance Relationship (I.P.R.)

Yates Drilling Co Parrot Federal Com 2, Dst 1 Gauge 76134

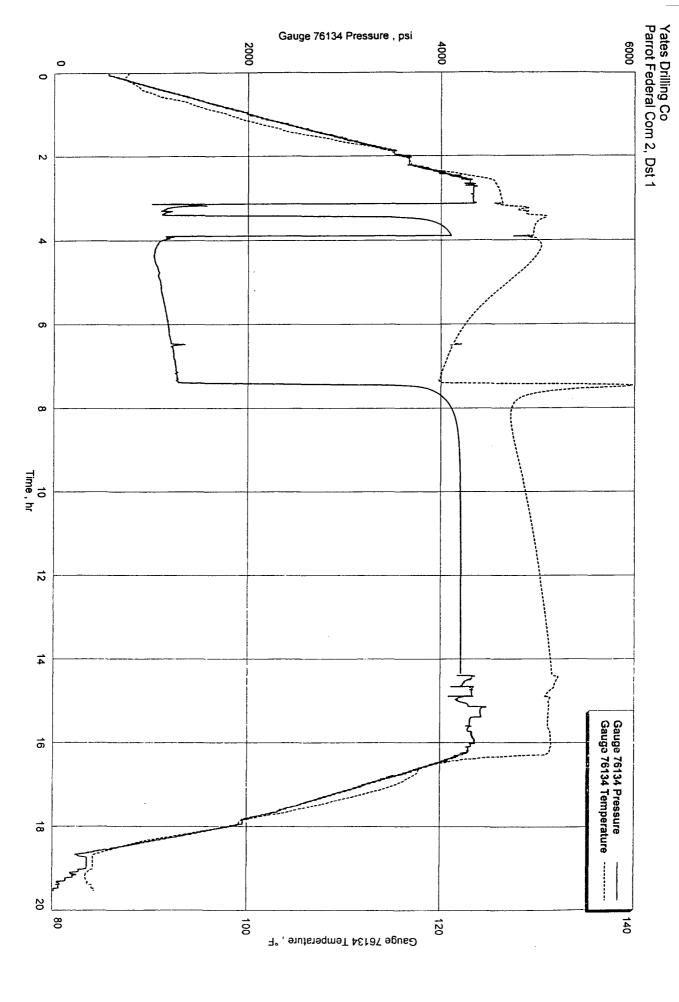
Test Data		Results	
Reservoir Pressure (pR)	4228.00 psi		
Bubble Point Pressure (pbp)	4251.00 psi	Maximum Oil Rate	74.143 bbl/d
Test Pressure (pwf)	1278.93 psi	Maximum Water Rate	bbl/d
Oil Test Rate (q ₀)	64.230 bbl/d	Maximum Total Rate	bbl/d
Water Test Rate (q _w)	bbl/d		



,g				
0.00 74.143 300.00 72.792 600.00 70.844 900.00 68.299 1200.00 65.156 1278.93* 64.230 1500.00 61.416 1800.00 57.079 2100.00 52.145 2400.00 46.613 2700.00 40.484 3000.00 33.758 3300.00 26.435 3600.00 18.514 3900.00 9.996 4200.00 0.881 4228.00 0.000	_			Total Rate
300.00 72.792 600.00 70.844 900.00 68.299 1200.00 65.156 1278.93* 64.230 1500.00 61.416 1800.00 57.079 2100.00 52.145 2400.00 46.613 2700.00 40.484 3000.00 33.758 3300.00 26.435 3600.00 18.514 3900.00 9.996 4200.00 0.881 4228.00 0.000	psi	bbl/d	bbl/d	bbl/d
	300.00 600.00 900.00 1200.00 1278.93* 1500.00 2100.00 2400.00 2700.00 3000.00 3600.00 3900.00 4200.00	72.792 70.844 68.299 65.156 64.230 61.416 57.079 52.145 46.613 40.484 33.758 26.435 18.514 9.996 0.881		
	. 1 - 1 - 4	(5)		

Note: * Test Point
** Bubble Point

Oil IPR based on Vogel's Equation. (Quadratic Curve Factor=0.2)



Yates Drilling Co. Parrot Federal Com #2

DISTRIBUTION OF FINAL REPORTS

Toby Rhodes [2 + Disk] Yates Drilling Co. 105 S. 4th St. Artesia NM 88210