

Kansas Corporation Commission Oil & Gas Conservation Division

1101738

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

TwpS. R
et from North / South Line of Section et from East / West Line of Section Nearest Outside Section Corner: SE SW Well #: Kelly Bushing: g Back Total Depth: t and Cemented at: Feet Collar Used? Yes No
et from
Nearest Outside Section Corner: SE SW Well #: Kelly Bushing: g Back Total Depth: t and Cemented at: Feet Collar Used? Yes No
Well #: Well #: Kelly Bushing: g Back Total Depth: t and Cemented at: Feet Collar Used? Yes \(\) No
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g Back Total Depth: Feet t and Cemented at: Feet Collar Used?
t and Cemented at: Feet Collar Used?
Collar Used? Yes No
ement circulated from: sx cmt.
nt Plan ne Reserve Pit)
ppm Fluid volume:bbls
hauled offsite:
License #:
TwpS. R
Permit #:
<i>r</i>

AFFIDAVIT

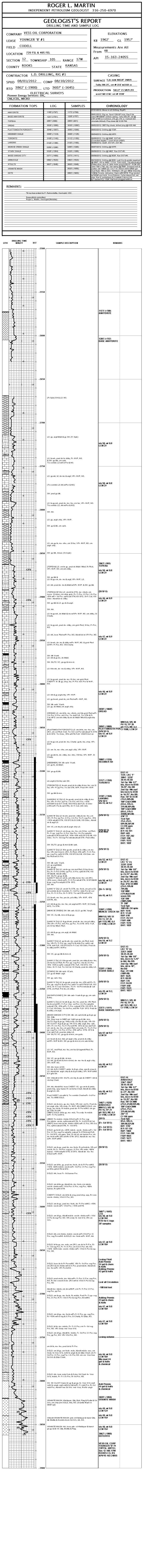
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:



Side Two Operator Name: _ Lease Name: _ _ Well #: _ County: _ INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report.



ATTACHMENT TO ACO-1

Younger B #1 – API 15-163-24055-00-00 **S2 NE SE SE**Sec 12-10S-17W
Rooks County, KS

	SAMPLE TOPS	LOG TOPS
ANHYDRITE TOP	1173 (+789)	1165 +797
ANHYDRITE BASE	1205 (+757)	1201 +761
TOPEKA	2863 (-901)	2861 -899
OREAD	3030 (-1068)	3028 -1066
PLATTS Porosity	3050 (-1088)	3049 -1087
HEEBNER	3088 (-1126)	3086 -1124
TORONTO	3112 (-1150)	3105 -1143
LANSING	3130 (-1168)	3128 -1166
Muncie CREEK	3260 (-1298)	3258 -1296
STARK	3328 (-3328)	3326 -1364
BKC	3373 (-1411)	3371 -1409
CONGLOMERATE	,	
ARBUCKLE	3482 (-1520)	3482 -1520
RTD	3608 (-1646)	
LTD	3607 (-1645)	
GRANITE WASH	3820 (-1858)	
RTD	3862 (-1900)	

DST #1 3084-3228 ' **Zone**: **Tor – LKC F**

Times: 30-45-45-60

1st open: Wk ½" blow inc to btm bkt – 10.25 min – No BB

2nd open: Weak surf blow inc to btm bkt-16.75 min – No BB

Rec.: 58' SIt OCM (1% oil, 98% Mud); 189' G&OWM (5% Gas, 15% Oil,

31% Wtr, 49% Mud); 189' G&OCMW (8% Gas, 11% Oil, 45% Wtr,

36% Mud); 436' TF

Tool – 2% Gas, 4% oil, 69% Wtr, 36% Mud (CI – 41,000 ppm)

IHP: 1512 FHP: 1513 IFP: 94-191 FFP: 197-282

ISIP: 603 FSIP: 598 TEMP: 103F

DST #2 3228-40' ' Zone: LKC G

Times: 30-45-45-60

1st open: Wk 1/8" blow, in to bob in 24.74 min – No BB 2nd open: Wl Surf blow, in to bob in 29.75 min – No BB

Rec.: 8' SIt OCMW (2% oil, 79% wtr, 19% mud); 126' MW (83% wtr,

17% mud - scum oil); 126' SW(100% SW). TF - 260'.

Tool - 100% wtr - oil specks

IHP: 1515 FHP: 1515

IFP: 17-69 FFP: 70-141

ISIP: 610 FSIP: 608 TEMP: 103F

DST #3 3253-3400' Zone: LKC-H - Pleasanton

Times: 30-45-45-60

1st open: Wk blow 1/8", inc to 1.25" in bkt, No BB 2nd open: Wk surf blow, died – 10 min, No BB **25' Drilling Mud (100% mud)**

IHP: 1625 FHP: 1623 IFP: 89-99 FFP: 94-99

ISIP: 725 FSIP: 650 TEMP: 103F

DST #4 3367-3507' ' **Zone: Arbuckle**

Times: 30-45-45-60

1st open: Wk ½" blow, inc to BOB in 22 min, No BB 2nd open: Wk surf blow, in to BOB in 33.25 min, No BB

Rec.: 98' OCWM (2% oil, 4% wtr. 94% mud); 189' G&OCWM (2% gas.

7% oil, 37% wtr, 54% mud). 287' TF. CI – 14,000.

Tool - 8% gas, 10% oil, 30% wtr, 52% mud

IHP: 1707 FHP: 1671 IFP: 87-136 FFP: 144-208

ISIP: 1060 FSIP: 1064 TEMP: 105F



ALLIED JIL & GAS SERV. JES, LLC 056471

		Federal Ta	x I.D.# 20-5975804			
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CONTRACTOR	1 D Della ,	214	<u>OWNER</u>			
TYPE OF JOB			— — — — — — — — — — — — — — — — — — —			
HOLE SIZE /2 1/2			_ CEMENT	170		·
CASING SIZE &		PTH 2.19.25	AMOUNT OR	DERED //o//	s_{x}	1.07 3
TUBING SIZE 2		PTH		32,00		
DRILL PIPE		PTH		92. Blue		
TOOL PRES. MAX 257		PTH	COMMON	3 1		
MEAS. LINE		<u>NIMUM</u> OE JOINT	_ COMMON	160	_@	
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To: Allied Oil & Gas Services, LLC. You are hereby requested to rent cementing equipment ALLIED OIL & GAS SERVICES, LLC 056512

REMIT TO PO.B	OX 31 ELL, KAI	NSAS 6760	55		•	ŞEK	VICE POINT: <i>Russell</i>	'KS
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TYPE OF JOB Par	1.001	T.D			CEMENT /	Used 200	<i>!</i>	
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TOOL port co	llar		PTH // 79		COMMON_	120	a /6.25	1950 00
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To: Allied Oil &	Gas Serv	vices, LLC	· ·	:				
You are hereby re	equested	to rent de	menting equipme	nt				<u> </u>
and furnish ceme	nter and	helper(s)	to assist owner o	ŗ				
contractor to do done to satisfacti	work as t	s IIsled. J unervision	He above work v of owner agent (or Yas			ATOT	ıL
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ALLIED CEIVIEN IING CO., LLC. 034661. Federal Tax I.D.# 20-5975804

REJUTTO P.O. BOX 31

SERVICE POINT;

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DATE 10-8-12	12	10	17			125- W			STATE	 '
CUNGER LEASE	WELL#	B#1	LOCATION	Codel	<u> </u>	-12 -12	12/0	(CC)(C)	1 /	77
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DRILL PIPE		DE	PTH							
TOOL			BPTH				<u>ب ۲ .</u>	9 <i>17.</i> 9_	134	12.50
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To Allied Ceme	enting C	o., LLC.		. 1.				_@		
You are hereby	request	ed to rent-	cementing e	quipment			· ·	_@		
and furnish cen	neriter at	nd helper(:	s) to assist o	wher of			•			~;;
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DIAMOND TESTING

P.O. Box 157

HOISINGTON, KANSAS 67544 (620) 653-7550 • (800) 542-7313

Company Vess Oil Corporation	Lease & Well No. Younger "B"	No. 1
Elevation 1962 KB Formation Toronto/Lansing "A"-"F"	Effective Pay	Ft. Ticket No. 2875
	17W County Rooks	
Demand Martin	amond Representative	Roger D. Friedly
Formation Test No. 1 Interval Tested from 3 Packer Depth 3,079 ft. Size 6 3/4 in. Packer Depth 3,084 ft. Size 6 3/4 in. Depth of Selective Zone Set ft.		Total Depth3,228 ftft. Sizeinft. Sizein.
Top Recorder Depth (Inside) 3,216 ft.	Recorder Number	
Bottom Recorder Depth (Outside) 3,225 ft.	Recorder Number	11033 Cap. 5,150 psi.
Below Straddle Recorder Depthft.	Recorder Number	psi.
ChloridesP.P.M.	Weight Pipe Length Drill Pipe Length Test Tool Length Anchor Length Anchor Length Surface Choke Size 7 7/8 in Main Hole Size 7 7/8 in mins. No blow back during shut-in. 4 mins. No blow back during shut-in. oil; 99%-mud) out: 5%-gas; 15%-oil; 31%-water; 49%- 8%-gas; 11%-oil; 45%-water; 36%-mud) Cr	
ime Set Packer(s) 2:07 A.M. Time Started off Bottom	1512 _{P.S.I.}	ım Temperature103°
nitial Flow PeriodMinutes(B)	94 P.S.I. to (C)_	191 _{P.S.I.}
nitial Closed In PeriodMinutes45(D)	603 P.S.I.	
inal Flow PeriodMinutes 45 (E)	197 P.S.I to (F)_	P.S.I.
inal Closed In PeriodMinutes 60 (G)	598 P.S.I.	
inal Hydrostatic Pressure(H)	1513 P.S.I.	



DIAMOND TESTING ROGER D. FRIEDLY - TESTER CELL 620-793-2043

Company Name Contact Well Name Unique Well ID Surface Location

Field

VESS OIL CORP BILL HORIGAN YOUNGER B #1 DST #1 TOR/LANS A-F 3084-3228 SEC 12-10S-17W-ROOKS-KS

WILDCAT

Test Information

Job Number

Test Unit Representative JAKE FAHRENBRUCH

Well Operator

VESS OIL CORP 2012/08/06

Report Date
CONVENTIONAL Prepared By

JAKE FAHRENBRUCH

DST #1 TOR/LANS (A-F) 3084-3228 Qualified By

Test Purpose

Initial Test

ROGER MARTIN

Well Fluid Type

Test Type

Formation

H2S

06 Water

Start Test Date Final Test Date

2012/08/06 Start Test Time

00:12:00 07:19:00

2012/08/06 Final Test Time

Remarks

RECOVERED:

58' SLTOCM 1% OIL, 98% MUD

1891 G&OWM 5% GAS, 15% OIL, 31% WTR, 49% MUD G&OCMW 8% GAS, 11% OIL, 45% WTR, 36% MUD 1891

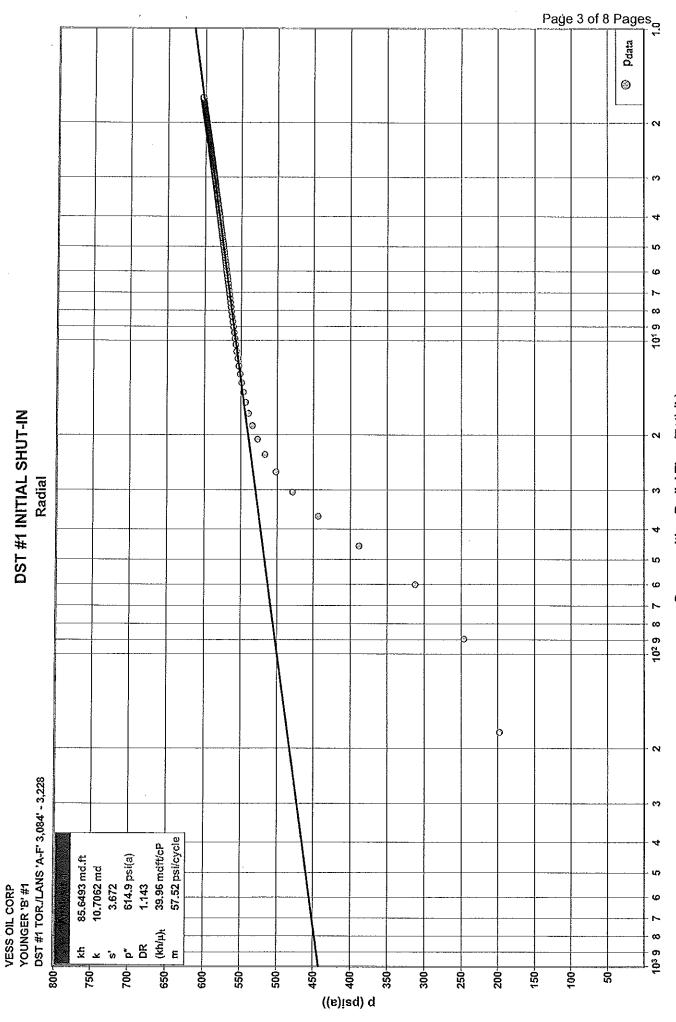
4361 **TOTAL FLUID**

TOOL SAMPLE: 2% GAS, 4% OIL, 69% WTR, 36% MUD

CHLORIDES41,000 Ppm

PH 7.0

RW .16 @ 69 deg.



Superposition Radial Time (∑∆t) (h)

Oil Well Test - Buildup

Radial Flow Analysis

Analysis Results

Flow Capacity (kh)	85.6 md.ft	Total Skin (s')	3,784
Effective Permeability (k)	8.5649 md	Skin Due to Damage (s _d)	3.784
Effective Gas Permeability (kg)	md	Skin Due To Inclination (stoc)	
Effective Oil Permeability (k _o)	8.5649 md	Skin Due To Partial Penetration (Spp)	
Effective Water Permeability (kw)	md	Pressure Drop Due to Total Skin (Δp _{skin})	189,1 psi(a)
Total Fluid Rate (in situ) ((qβ) _t)	14.1 rbbl/d	Damage Ratio (DR)	1.148
Total Mobility ((k/μ) _t)	4.00 md/cP	Flow Efficiency (FE)	0.871
Total Transmissivity ((kh/μ) _t)	39.96 mdft/cP	, ,	
Semi-Log Slope (m)	57.52 psi/cycle		

Reservoir Parameters

Net Pay (h)	10.000 ft
Total Porosity (ot)	8.00%
Gas Saturation (S _g)	0.00%
Oil Saturation (S _o)	80.00%
Water Saturation (S _w)	20.00 %
Formation Compressibility (c _i)	5.3341e-061/psi
Total Compressibility (c _i)	1.3803e-051/psi
Wellbore Radius (r _w)	0.300 ft

Pressures

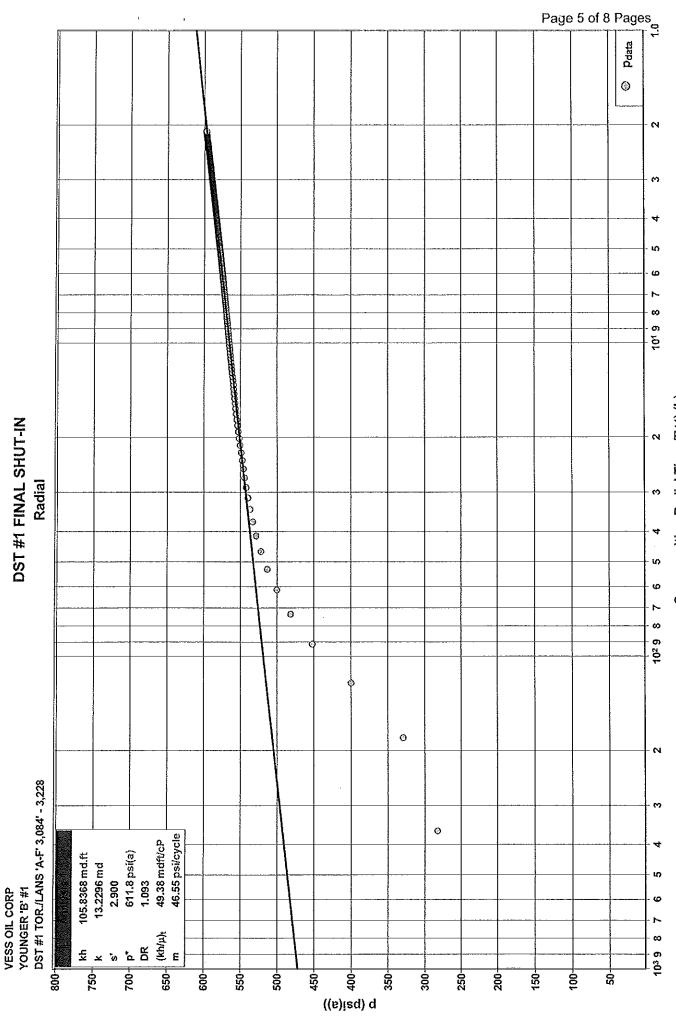
Extrapolated Pressure (p*)	614.9 psi(a)
Final Flowing Pressure (p _{vfo})	191.9 psi(a)
Final Measured Pressure (plast)	0.3 psi(a)

Fluid Properties

Reservoir Temperature (Tresv)	103.0 °F
Reservoir Pressure (presy)	1658.3 psi(a)
Oil Gravity (γ _o)	34.0 °API
Oil Viscosity (μ _o)	2.1435 cP
Oil Compressibility (c _o)	9.8285e-06 1/psi
Oil Formation Volume Factor (B _o)	1.178
Solution Gas Ratio (R _s)	325.9 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

Production and Times

Corrected Time (t _c)	0.49 h
Total Cumulative Production Oil (Cu	IddM 00.0 (form
Final Oil Rate (q _{o final})	12.0 bbi/d-



Superposition Radial Time (∑∆t) (h)

Oil Well Test - Buildup

Radial Flow Analysis

Analysis Results

Flow Capacity (kh)	106 md.ft	Total Skin (s')	3.011
Effective Permeability (k)	10.5837 md	Skin Due to Damage (s _d) 3	3.011
Effective Gas Permeability (kg)	md	Skin Due To Inclination (sinc)	
Effective Oil Permeability (k _o)	10.5837 md	Skin Due To Partial Penetration (Spp)	
Effective Water Permeability (kw)	md	Pressure Drop Due to Total Skin (Δp _{skin}) 1	(21.8 psi(a)
Total Fluid Rate (in situ) ((gβ) _i)	14.1 rbbl/d	1 1 2 2 2 2 2	.097
Total Mobility ((k/µ) _t)	4.94 md/cP	Flow Efficiency (FE) 0	.911
Total Transmissivity ((kh/µ),)	49.38 mdft/cP	• • •	
Semi-Log Slope (m)	46.55 psi/cycle		

Reservoir Parameters

Net Pay (h)	10,000 ft
Total Porosity (φ _t)	8.00%
Gas Saturation (S _g)	0.00%
Oil Saturation (S _o)	80.00%
Water Saturation (S _w)	20.00 %
Formation Compressibility (c _i)	5.3341e-061/psi
Total Compressibility (c _t)	1.3803e-051/psi
Wellbore Radius (r _w)	0.300 ft

Pressures

Extrapolated Pressure (p*)	611.8 psi(a)
Final Flowing Pressure (pwfo)	282.1 psi(a)
Final Measured Pressure (plast)	0.3 psi(a)

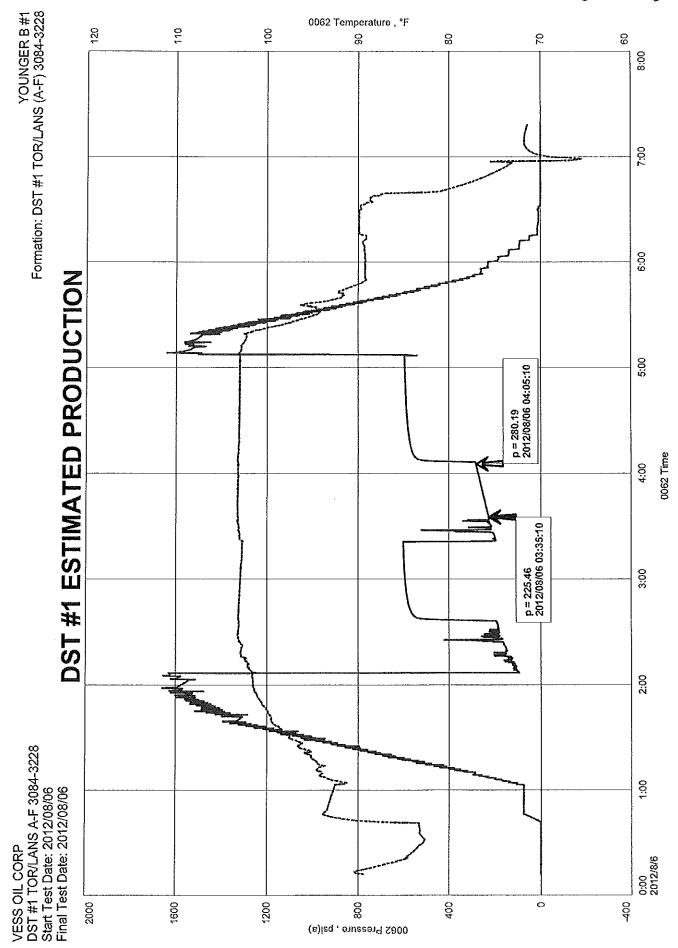
Fluid Properties

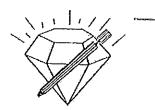
Reservoir Temperature (Tresy)	103.0 °F
Reservoir Pressure (presv)	1658,3 psi(a)
Oil Gravity (γ _ο)	34.0 °API
Oil Viscosity (μ _o)	2.1435 cP
Oil Compressibility (c _o)	9.8285e-06 1/psi
Oil Formation Volume Factor (Bo)	1.178
Solution Gas Ratio (R _s)	325.9 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

Production and Times

Corrected Time (t _c)	1.25 h
Total Cumulative Production Oil (Cumoll)	1ddM 00.0
Final Oil Rate (qo final)	12.0 bbl/d

ESTIMATED	DAILY	PRODUCTION	12
AVERAGE	PERCENTAGE		11.40%
	DAILY	PRODUCTION	104
	TOTAL	TIME	1440
	TIME	CHANGE	30
	FLUID	GRADIENT	0.359
DRILL.	PIPE	SIZE-ID G	0.0142
	PRESSURE	CHANGE	55
	FIRST	READING	
	SECOND	READING	280
		DESCRIPTION	FINAL FLOW





DIAMOND TESTING

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Page 1 of 2 Pages

Company Vess Oil Corporation Lease & Well No. Younger "B" No. 1 Elevation 1962 KB Formation Lansing "G" Effective Pay___ -- Ft. . 2876 Ticket No. Date __ 8-6-12 Sec. Range County Rooks Kansas State Test Approved By Roger L. Martin Roger D. Friedly Diamond Representative 2 Interval Tested from Formation Test No. 3,228 ft. to _____ 3,240 ft. 3,240 ft Total Depth___ 3,223 ft. 6 3/4 in. Packer Depth Size Packer Depth ft. Size -- in. 3,228 ft. Packer Depth 6 3/4 in. Size Packer Depth ft. Size ⁻⁻in. Depth of Selective Zone Set_ Top Recorder Depth (Inside) 3,229 ft. 0062 Cap. Recorder Number 5,000 psi. Bottom Recorder Depth (Outside) 3,237 ft. 11033 5,150 _{psi.} Recorder Number Cap. Below Straddle Recorder Depth Recorder Number_ Cap._ DSI. Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length -- ft I.D. _____ Chemical Mud Type 62 Viscosity Weight Pipe Length __ft l.D.____ ⁻⁻in. 9.0 Weight 6.4 Water Loss 3,201 ft I.D.____ Drill Pipe Length _____ 3 1/4 in. 1.700 Chlorides P.P.M. Test Tool Length _____ 27 ft Tool Size 3 1/2-IF in. Sterling Jars: Make 5 Serial Number Anchor Length _ 12 ft. Size 4 1/2-FH in. No Did Well Flow? Reversed Out 1_{.in.} Surface Choke Size_ Bottom Choke Size 5/8 in. 7 7/8 in. Main Hole Size 4 1/2-XH in. Tool Joint Size Blow: 1st Open: Weak, 1/8 in. blow increasing. Off bottom of bucket in 24 3/4 mins. No blow back during shut-in. 2nd Open: Weak, surface blow increasing. Off bottom of bucket in 29 3/4 mins. No blow back during shut-in. 8 ft. of slightly oil cut muddy water = .082080 bbls. (Grind out: 2%-oil; 79%-water; 19%-mud) Recovered 126 ft. of muddy water w/a scum of oil = 1.292760 bbls. (Grind out: 83%-water; 17%-mud) Recovered 126 ft. of salt water = 1.292760 bbls. (Grind out: 100%-water) Chlorides: 66,500 Ppm PH: 7.0 RW: .09 @ 94° Recovered 260 ft. of TOTAL FLUID = 2.667600 bbls. Recovered Recovered ft. of Recovered ft. of temarks Tool Sample Grind Out: 100%-water with oil specks ime Set Packer(s) 3:17 P.M. Time Started off Bottom 6:17 P.M. Maximum Temperature 103° ıitial Hydrostatic Pressure.....(A)_ 1515 P.S.L. nitial Flow Period......Minutes_ 17_P.S.I. to (C)_____ (B)___ itial Closed In Period......Minutes 45 610 P.S.I. (D) nal Flow Period......Minutes 45 70 P.S.I to (F) 141 P.S.I. (E) nal Closed In Period......Minutes____ 608 P.S.I. (G) nal Hydrostatic Pressure....(H) 1515 P.S.I.



DIAMOND TESTING **ROGER D. FRIEDLY - TESTER** CELL 620-793-2043

Company Name Contact Well Name Unique Well ID Surface Location

Field

VESS OIL CORP **BILL HORIGAN** YOUNGER B#1 **DST #2 LANSING G 3228-3240**

SEC 12-10S-17W-ROOKS CO-KS WILDCAT

Test Information

Job Number Test Unit NO. 5 Representative JAKE FAHRENBRUCH Well Operator **VESS OIL CORP** Report Date 2012/08/06

Test Type Formation **Test Purpose** Well Fluid Type H2S

CONVENTIONAL Prepared By DST #2 LANSING G 3228-3240 Qualified By Initial Test

06 Water

Start Test Date **Final Test Date**

2012/08/06 Start Test Time 2012/08/06 Final Test Time

13:41:00 20:29:00

JAKE FAHRENBRUCH

ROGER MARTIN

Remarks

RECOVERED:

SLTOCMW 2% OIL, 79% WTR, 19% MUD MW 83% WTR, 17% MUD, SCUM OF OIL

126' **SW 100% WTR** 260' TOTAL FLUID

TOOL SAMPLE: 100% WTR-OIL SPECKS

8,

126'

CHLORIDES 66,500 Ppm PH 7.0 RW .09 @ 94 deg

COMPANY_____

8

0

400

800

0062 Pressure, psi(a)

1200

VESS OIL CORP DST #2 LANSING G 3228-3240 Start Test Date: 2012/08/06 Final Test Date: 2012/08/06

2000

1600



DIAMOND TESTING

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Page 1 of 2 Pages

Company Vess Oil Corporation	Lease & Well No. Younger "E	3" No. 1
Elevation 1962 KB Formation Kansas City "H"/Plea		
	ange 17W County Rooks	
Test Approved By Roger L. Martin	Diamond Representative	
Formation Test No3 Interval Tested from	3,253 _{ft. to} 3,400 _{ft.}	Total Depth3,400 ft
Packer Depth3,248 ft. Size6 3/4 in.		ft. Sizein.
Packer Depth 3,253 ft. Size 6 3/4 in.		ft. Sizein.
Depth of Selective Zone Setft.	,	
Top Recorder Depth (Inside) 3,386 ft.	Recorder Number_	0062 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,397 ft.	. Recorder Number	11033 Cap. 5,150 psi.
Below Straddle Recorder Depthft.	. Recorder Number	psi.
Drilling Contractor L. D. Drilling, Inc Rig 1	Drill Collar Length	ft I.Din
Mud Type Chemical Viscosity 49	Weight Pipe Length	""ft l.D. ""in.
Weight 9.2 Water Loss 6.4	_cc. Drill Pipe Length	3,226 ft I.D. 3 1/4 in.
Chlorides 1,700 P.P.M.	Test Tool Length	27 ft Tool Size 3 1/2-IF in
Jars: Make <u>Sterling</u> Serial Number 5		7' drill pipe Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No		n. Bottom Choke Size 5/8 in
	Main Hole Size7 7/8 i	n. Tool Joint Size 4 1/2-XH in.
Blow: 1st Open: Weak, 1/8 in. blow increasing to 1 1/4 in. in bucket.	No blow back during shut-in.	
2nd Open: Weak, surface blow. Died after 10 mins. No blow b		
Recovered 25 ft. of drilling mud = .256500 bbls. (Grind out: 1	00%-mud)	
Recovered ft. of		
Remarks Tool Sample Grind Out: 100%-drilling,mud		
2).44 D.M	P.44 D.54	4000
Time Set Packer(s) 2:11 P.M. Time Started off		num Temperature103°
Initial Hydrostatic Pressure	• • •	
initias i low i- oriod	_(B) <u>89</u> P.S.I. to (C)	99 P.S.I.
Initial Closed In PeriodMinutes45	(D) 725 P.S.I.	20
Final Flow PeriodMinutes 45	_(E) 94 P.S.I to (F)	99 P.S.I.
Final Closed In PeriodMinutes60	(G) 650 P.S.I.	
Final Huduadalla Dassura	48 1623 p.c.i	



DIAMOND TESTING ROGER D. FRIEDLY - TESTER CELL 620-793-2043

Company Name Contact Well Name Unique Well ID Surface Location

VESS OIL CORP BILL HORIGAN YOUNGER 'B' #1 DST #3 KC 'H' - PLEAS. 3253-3400

SEC 12-10S-17W-ROOKS CO.-KS WILDCAT

Test Information

Job Number **Test Unit**

NO. 5

Representative JAKE FAHRENBRUCH Well Operator Report Date

VESS OIL CORP

2012/08/07

Test Type Formation **Test Purpose** Well Fluid Type

CONVENTIONAL Prepared By DST #3 KC 'H' - PLEAS. 3253-3400 Qualified By JAKE FAHRENBRUCH

ROGER MARTIN

Initial Test

01 Oil

H2\$

Field

Start Test Date Final Test Date 2012/08/07 Start Test Time 2012/08/07 Final Test Time 12:06:00

19:20:00

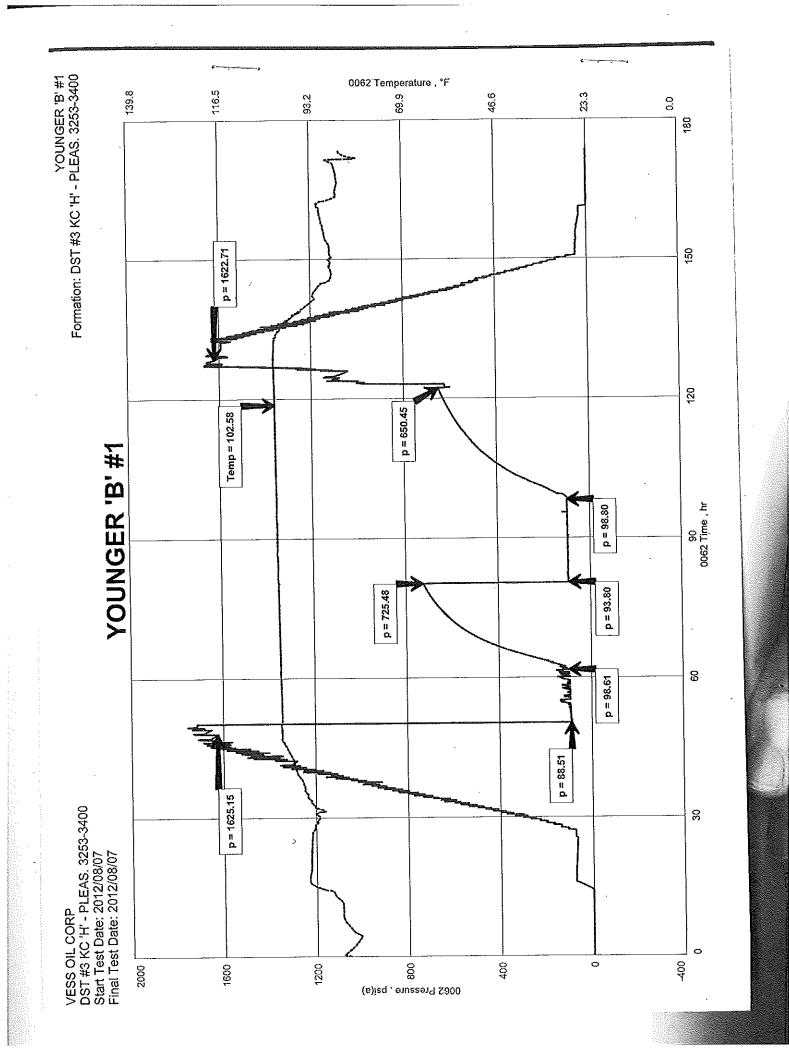
Remarks

RECOVERED:

25'

DRILLING MUD 100%MUD

TOOL SAMPLE: 100% DRILLING MUD



Page 1 of 8 Pages



DIAMOND TESTING P.O. Box 157

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Company Vess Oil Corporation	Lease & Well No. Younger "B" No. 1
Elevation 1962 KB Formation Arbuckle	Effective Pay Ft. Ticket No. 2878
Date 8-8-12 Sec. 12 Twp. 10S Rang	4704
Test Approved By Roger L. Martin	Diamond Representative Roger D. Friedly
Formation Test No. 4 Interval Tested from	3,367 ft. to 3,507 ft. Total Depth 3,507 ft
Packer Depth 3,362 ft. Size 6 3/4 in.	Packer Depthft. Sizefin.
Packer Depth 3,367 ft. Size 6 3/4 in.	Packer Depthft. Sizein.
Depth of Selective Zone Setft.	
Top Recorder Depth (Inside) 3,468 ft.	Recorder Number 0062 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,504 ft.	Recorder Number 11033 Cap. 5,150 psi.
Below Straddle Recorder Depthft.	Recorder Number Cappsi.
Drilling Contractor L. D. Drilling, Inc Rig 1	Drill Collar Lengthrft I.Dir
Mud TypeChemicalViscosity56	Weight Pipe Lengthft I.Din.
Weight9.3Water Loss6.4cc	c. Drill Pipe Length 3,340 ft I.D. 3 1/4 in.
Chlorides 1,700 P.P.M.	Test Tool Length 27 ft Tool Size 3 1/2-IF in
Jars: Make Sterling Serial Number 5	
Did Well Flow? No Reversed Out No	Surface Choke Size1in. Bottom Choke Size5/8 in
	Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in
Blow: 1st Open: Weak, 1/2 in. blow increasing. Off bottom of bucket in 2	2 mins. No blow back during shut-in.
2nd Open: Weak, surface blow in 1 1/2 mins. increasing. Off botto	m of bucket in 33 1/4 mins. No blow back during shut-in.
Recovered 98 ft. of oil cut watery mud = 1.005480 bbls. (Grind o	ut: 2%-oil; 4%-water; 94%-mud)
	i out: 2%-gas; 7%-oil; 37%-water; 54%-mud) Chlorides: 14,000 Ppm PH: 7.0 RW: .36 @ 82°
Recovered $\frac{287}{\text{ft. of}}$ ft. of $\frac{\text{TOTAL FLUID}}{\text{TOTAL FLUID}} = 2.944620 \text{ bbls.}$	
Pageword ft of	
•	
Recovered ft. of	
Recoveredn. or Remarks_Tool Sample Grind Out: 8%-gas; 10%-oil; 30%-wa	iter: 52%-mud
Remarks	
Time Set Packer(s) 6:40 P.M. Time Started off Bo	ttom9:40 P.M Maximum Temperature105°
nitial Hydrostatic Pressure(A	N)1707
nitial Flow PeriodMinutes(E	8) 87 P.S.I. to (C) 136 P.S.I.
nitial Closed in PeriodMinutes45([D)P.S.I.
Final Flow PeriodMinutes45(E	E) 144 P.S.I to (F) 208 P.S.I.
Final Closed In PeriodMinutes60 (0	3)
Final Hydrostatic Pressure(1671 P.S.I.



DIAMOND TESTING ROGER D. FRIEDLY - TESTER CELL 620-793-2043

Company Name Contact Well Name Unique Well ID Surface Location Field VESS OIL CORP BILL HORIGAN YOUNGER 'B' #1 DST #4 ARBUCKLE 3367-3507 SEC 12-10S-17W-ROOKS CO.-KS

EC 12-105-17W-ROOKS CO,-KS WILDCAT

Test Information

Job Number
Test Unit NO. 5
Representative Well Operator
Report Date NO. 5
VESS OIL CORP
2012/08/09

Test Type Formation Test Purpose Well Fluid Type

Start Test Date

Final Test Date

CONVENTIONAL Prepared By DST #4 ARBUCKLE 3367-3507 Qualified By

JAKE FAHRENBRUCH ROGER MARTIN

Initial Test 01 Oil

H2S

2012/08/08 Start Test Time 2012/08/08 Final Test Time

16:16:00 23:55:00

Remarks

RECOVERED:

OCWM 2% OIL, 4% WTR, 94% MUD

189'

G&OCWM 2% GAS, 7% OIL, 37% WTR, 54% MUD

287'

98'

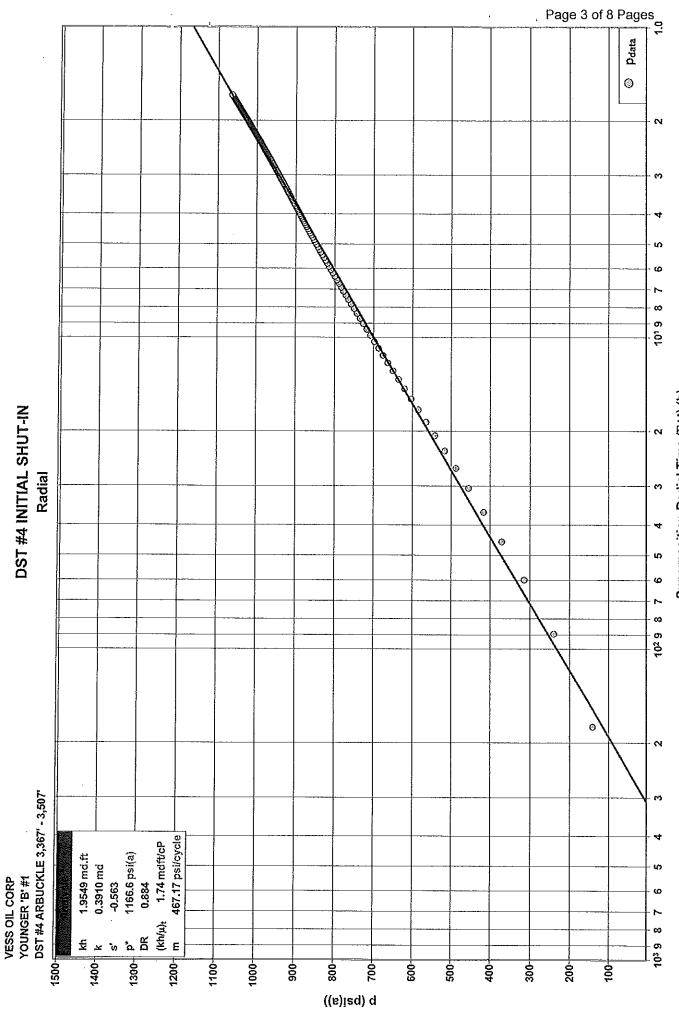
TOTAL FLUID

TOOL SAMPLE: 8% GAS, 10% OIL, 30% WTR, 52% MUD

CHLORIDES: 14,000 Ppm

RW: .36 @ 82 Deg

PH: 7.0



Superposition Radial Time (∑∆t) (h)

Oil Well Test - Buildup

Radial Flow Analysis

Analysis Results

Flow Capacity (kh)	1.95 md.ft	Total Skin (s')	-0.563
Effective Permeability (k)	0.3910 md	Skin Due to Damage (s _d)	-0,563
Effective Gas Permeability (kg)	md	Skin Due To Inclination (sinc)	
Effective Oil Permeability (k _o)	0.3910 md	Skin Due To Partial Penetration (spp)	
Effective Water Permeability (k _v	,) md	Pressure Drop Due to Total Skin (Δp _{skin})	psi(a)
Total Fluid Rate (in situ) ((qβ) _t)	5.0 rbbl/d	Damage Ratio (DR)	0,884
Total Mobility ((k/μ) _t)	0.35 md/cP	Flow Efficiency (FE)	1.131
Total Transmissivity ((kh/μ) _t)	1.74 mdft/cP		
Semi-Log Slope (m)	467.17 psi/cycle		

Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (%)	15.00 %
Gas Saturation (S _o)	0.00 %
Oil Saturation (So)	80.00 %
Water Saturation (S _w)	20.00 %
Formation Compressibility (c _i)	4.1093e-06 1/psi
Total Compressibility (c _t)	1.5023e-05 1/psi
Wellbore Radius (rw)	0.300 ft

Pressures

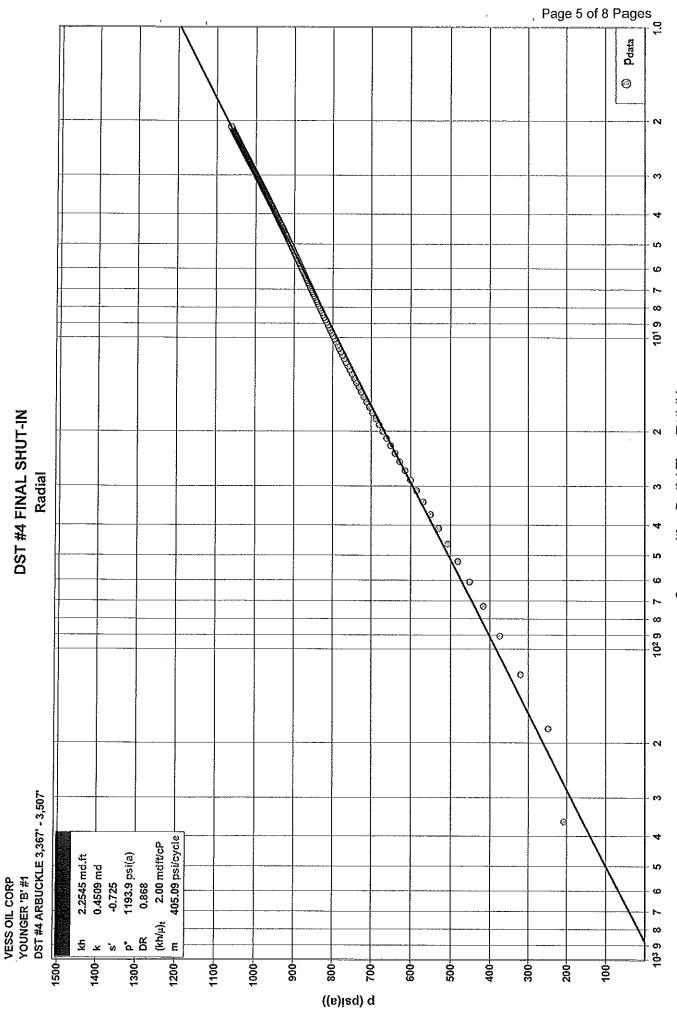
Extrapolated Pressure (p*)	1166.6 psi(a)
Final Flowing Pressure (pwfo)	135.9 psi(a)
Final Measured Pressure (plast)	0.3 psi(a)

Fluid Properties

Reservoir Temperature (Tresy)	105.0 °F
Reservoir Pressure (presy)	1879.9 psi(a)
Oil Gravity (yo)	39.0 °API
Oil Viscosity (μ _o)	1.1246 cP
Oil Compressibility (c _o)	1.2891e-05 1/psi
Oil Formation Volume Factor (Bo)	1.249
Solution Gas Ratio (R _s)	465.1 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

Production and Times

Corrected Time (t _c)	0.49 h
Total Cumulative Production Oil (Cumoli)	0.00 Mbbl
Final Oil Rate (qo final)	4.0 bbi/d



Superposition Radial Time (ZAt) (h)

Oil Well Test - Buildup

Radial Flow Analysis

Analysis Results

Flow Capacity (kh)	2.25 md.ft	Total Skin (s')	-0.725
Effective Permeability (k)	0.4509 md	Skin Due to Damage (s _d)	-0.725
Effective Gas Permeability (kg)	md	Skin Due To Inclination (sinc)	
Effective Oil Permeability (k _o)	0.4509 md	Skin Due To Partial Penetration (Spp)	
Effective Water Permeability (k,) md	Pressure Drop Due to Total Skin (Δp _{skin})	psi(a)
Total Fluid Rate (in situ) ((qβ) _t)	5.0 rbbl/d	Damage Ratio (DR)	0.868
Total Mobility ((k/μ) _t)	0.40 md/cP	Flow Efficiency (FE)	1.153
Total Transmissivity ((kh/μ) _t)	2.00 mdft/cP	- ,	
Semi-Log Slope (m)	405.09 psi/cycle		

Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (φ _t)	15.00 %
Gas Saturation (S _g)	0.00%
Oil Saturation (So)	80.00%
Water Saturation (S _w)	20.00 %
Formation Compressibility (c _i)	4.1093e-061/psi
Total Compressibility (c _t)	1.5023e-051/psi
Wellbore Radius (rw)	0.300 ft

Pressures

Extrapolated Pressure (p*)	1193.9 psi(a)
Final Flowing Pressure (pwfo)	207.8 psi(a)
Final Measured Pressure (plast)	0.3 psi(a)

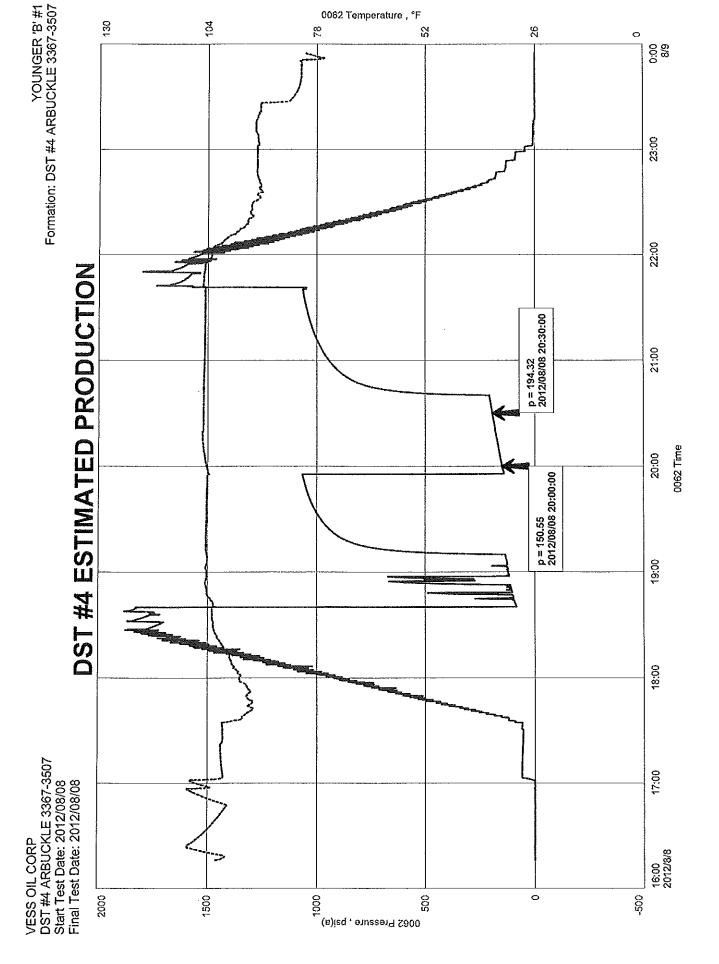
Fluid Properties

Reservoir Temperature (Tresy)	105.0 °F
Reservoir Pressure (press)	1879,9 psi(a)
Oil Gravity (70)	39.0 API
Oil Viscosity (μ _o)	1.1246 cP
Oil Compressibility (c _o)	1.2891e-05 1/psi
Oil Formation Volume Factor (Bo)	1.249
Solution Gas Ratio (R _s)	465.1 scf/bb
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

Production and Times

Corrected Time (t _c)	1.24 h
Total Cumulative Production Oil (Cum _{oll})	0.00 Mbbl
Final Oil Rate (q _{o final})	4.0 bbl/d

ESTIMATED	DAILY	PRODUCTION	7
AVERAGE	PERCENTAGE	미	5 00%
		PRODUCTION	
	TOTAL	TIME	1440
	TIME	CHANGE	30
	FLUID	GRADIENT	0.359
DRILL-	PIPE	SIZE-ID	0.0142
	PRESSURE	CHANGE	43
	FIRST	READING	151
	SECOND	READING	194
		21	FINAL FLOW



0062 Temperature, °F

