

james r. craig
PETROLEUM CONSULTANT

~~20~~-20s-11W
29

ORIGINAL

GEOLOGICAL REPORT

OCT 18 1996

OPERATOR: MCNEISH OIL OPERATIONS
P. O. BOX 734
WINFIELD, KANSAS 67156

WELL: EATINGER # 2
API # 15-009-24588

LOCATION: NW NW SW SEC ~~30~~²⁹ T 20.5 R 11. W
BARTON COUNTY, KANSAS

CONTRACTOR: L. D. DRILLING CO.
GREAT BEND, KANSAS

DATE SPUD: MARCH 4, 1995

DATE COMPLETE: MARCH 10, 1995

SURFACE CASING: 8 5/8 SET AT 256'

PRODUCTION CASING: 5 1/2" SET AT TD'

ZONES DST: L/KC "H" ZONE
ARBUCKLE

ELECTRIC LOGS: WIRE-TECH GUARD, DUAL
INDUCTION, COMP DENSITY

STATUS: CASING SET FOR TESTING

ORIGINAL

March 11, 1995

McNeish Oil Operations
P. O. Box 734
Winfield, Kansas 67156

RE: Eatinger # 2
Sec 29 T20 R11
Barlon County , Kansas

Dear Sirs:

The above captioned well was under my geological supervision from a depth of 2900' to a total depth of 3425'. Drilling time and samples were saved from 2900' to TD, and all samples checked for shows of hydrocarbons with microscope and black light. Shows of oil were encountered in the Lansing Kansas "H" zone and the Arbuckle Formation. Production casing was run for futhur testing of the Arbuckle.

FORMATION TOPS

E-LOG

ELEVATION: 1802 KB

(All measurements from Kelly Bushing)

	DEPTH	SUB-SEA
Anhydrite	548	+ 1254
Heebner	2958	- 1156
Brown Lime	3088	- 1286
Lansing	3102	- 1300
Arbuckle	3339	- 1537
RTD	3429	- 1627

OR - 11

SAMPLE DESCRIPTIONS

Pertinent Zones

LANSING/KANSAS CITY "H"

3230--3240 Limestone, tan, granular good oolitic porosity, good show free oil, good odor good fluorescence.

DST # 1 3223/3240 IF: Weak blow throughout (1/2" To 1 1/2")
FF: Weak blow throughout (1/4").
Recovered 90' of gas in pipe. 90' muddy water. IFP 31# to 31# in 30" ICIP 873# in 60"
FFP 41# to 52# in 60", FSIP 852# in 60".

ARBUCKLE

3338-3345 Dolomite, Gray, medium crystalline, dense, 1% Fluorescence with a trace of stained dolomite with instant cut.

3346-3358 Dolomite, Gray to tan, medium crystalline, fair saturation in several pieces, good odor good show of free oil with 90% fluorescence.

DST # 2 3325/3358 IF: Weak blow to good blow, (1/2" to 8")
FF: Weak blow throughout (1/2" to 2")
Recovered 540' of gas in pipe, 5' clean oil, 50' Heavy oil cut gassy mud (18% oil, 48% gas, 1% water, 33% mud) 60' oil & gas cut mud (10% oil, 7% gas, 7% water, 76% mud)
IF: 31# to 41# in 60" ICIP 634# in 60"
FF: 62# to 62# in 60" FCIP 531# in 60"

ARBUCKLE (cont.)

3358-3378 **Dolomite, Gray to tan, Fine to medium xln and rhombohedral with good saturation and a good odor, show free oil, 90% fluorsence**
The samples appear to be water bearing below 3380'.

STRUCTURAL DATA

FORMATION	#1	#2
Anhydrite	+ 1250	+ 1254
Heebner	- 1154	- 1156
Brown Lime	- 1285	- 1286
Lansing	- 1300	- 1300
B/Kansas City	- 1531	- 1534
Arbuckle Dolomite	- 1532	- 1537
Anh/Heeb	2404'	2410'
Anh/Arb	2782'	2791'

Production casing was run on the subject well to futhur test the "Arbuckle Dolomite".

Yours truly,


James R. Craig



FORMATION TESTING

TICKET N^o 20711

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation 1802 KB Formation LANSING Eff. Pay _____District GREAT Bend Date 3-8-75 Customer Order No. _____COMPANY NAME McNeish Oil OperationsADDRESS P.O. Box 734 Winfield, Ks 67156LEASE AND WELL NO. EATINGER COUNTY BARTON STATE Ks Sec. 29 Twp. 30 Rge. 11Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested 2Mail Charts To Same Address _____ No. Copies Requested 2Formation Test No. 1 Interval Tested From 32.23 ft. to 32.40 ft. Total Depth 32.40 ft.Packer Depth 32.18 ft. Size 6 3/8 in. Packer Depth _____ ft. Size _____ in.Packer Depth 32.23 ft. Size 6 3/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 32.35 ft. Recorder Number 10270 Cap. 4150Bottom Recorder Depth (Outside) 32.38 ft. Recorder Number 13550 Cap. 4175

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor L.D. DAVIS I. D. _____Mud Type CHEMICAL Viscosity 4.2 I. D. _____Weight 9 Water Loss 11 cc. Drill Pipe Length 320.3 I. D. 3.8Chlorides 6000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2Jars: Make _____ Serial Number _____ Anchor Length 17 ft. Size 5 1/2Did Well Flow? _____ Reversed Out? _____ Surface Choke Size 3/4 in. Bottom Choke Size 3/4Main Hole Size 2 7/8 in. Tool Joint Size 4 1/2 X 1 1/2Blow: 2 F - WPAK Blow Throughout - 1/2" to 1 1/2" Blow1 F - WPAK Blow Throughout - 1/4" BlowRecovered 90 ft. of GAS IN PIPE

Recovered _____ ft. of _____

Recovered 90 ft. of Muddy WATER 10% mud 90% WATER

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides 68000 P.P.M. Sample Jars used 2 Remarks: _____Time On Location 5:45 A.M. Time Pick Up Tool 6:40 A.M. Time Off Location 1:00 P.M.Time Set Packer(s) 8:00 A.M. Time Started Off Bottom 11:30 A.M. Maximum Temperature 105°Initial Hydrostatic Pressure _____ (A) 1630 P.S.I.Initial Flow Period _____ Minutes 30 (B) 31 P.S.I. to (C) 31 P.S.I.Initial Closed In Period _____ Minutes 60 (D) 873 P.S.I.Final Flow Period _____ Minutes 60 (E) 41 P.S.I. to (F) 52 P.S.I.Final Closed In Period _____ Minutes 60 (G) 852 P.S.I.Final Hydrostatic Pressure _____ (H) 1589 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By _____
Signature of Customer or his authorized representativeWestern Representative Raf SchwagerThank you

FIELD INVOICE

Open Hole Test	☒
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$



P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 20712

Elevation 1802 LB Formation Arkuckle Eff. Pay _____ Ft.

District GREAT BEND Date 3-9-95

Customer Order No. _____

COMPANY NAME McNeish Oil Operations

ADDRESS P.O. Box 734 Winfield, Ks 67156

LEASE AND WELL NO. EATINGER #1 COUNTY BARTON STATE Ks Sec 29 Twp 20 Rge 11

Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested 2

Mail Charts To Same Co. Name _____ Address _____ No. Copies Requested 2

Formation Test No. 2 Interval Tested From 3325 ft. to 3358 ft. Total Depth 3358 ft.

Packer Depth 3320 ft. Size 6 3/8 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 3325 ft. Size 6 3/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3348 ft.

Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 3351 ft.

Recorder Number 13550 Cap. 4125

Below Straddle Recorder Depth _____ ft.

Recorder Number _____ Cap. _____

Drilling Contractor L.D. Davis I. D. _____ in.

Drill Collar Length _____ I. D. _____ in.

Mud Type Chemical Viscosity 4.2

Weight Pipe Length _____ I. D. _____ in.

Weight 9.3 Water Loss 12.8 cc.

Drill Pipe Length 3305 I. D. 3.8 in.

Chlorides 2000 P.P.M.

Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make _____ Serial Number _____

Anchor Length 33 ft. Size 5 1/2 in.

Did Well Flow? _____ Reversed Out _____

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X 1 1/2 in.

Blow IF - WEAK building to a good blow 1/2" to 8" blow

IF - WEAK blow throughout 1/2" to 2" blow

Recovered 540 ft. of GAS IN PIPE

Recovered 5 ft. of CLEAN OIL GRAVITY 41

Recovered 50 ft. of Heavy oil cut gassy mud 18% oil 48% gas 17% water 33% mud

Recovered _____ ft. of _____

Recovered 60 ft. of oil gas cut mud 10% oil 7% gas 7% water 76% mud

Chlorides _____ P.P.M. Sample Jars used 1 Remarks: _____

Time On Location 2:00 AM. Time Pick Up Tool 2:45 AM. Time Off Location _____ AM.

Time Set Packer(s) 3:45 PM. Time Started Off Bottom 7:45 AM. Maximum Temperature 110 PM.

Initial Hydrostatic Pressure _____ (A) 1734 P.S.I.

Initial Flow Period _____ Minutes 60 (B) 31 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period _____ Minutes 60 (D) 634 P.S.I.

Final Flow Period _____ Minutes 60 (E) 62 P.S.I. to (F) 602 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 531 P.S.I.

Final Hydrostatic Pressure _____ (H) 1713 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Ray Schwaner
Signature of Customer or his authorized representative

Western Representative Ray Schwaner

FIELD INVOICE

Open Hole Test ✓ \$ _____
Misrun \$ _____
Straddle Test \$ _____
Jars \$ _____
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ _____
Fluid Sampler \$ _____
Extra Charts \$ _____

COMPANY McNeish Oil FARM Eatinger WELL NO. 2
 SEC. 29 TWP. 20 RGE. 11 LOC. 29-20-11 COUNTY Barton STATE Ks
 CONTRACTOR L.D. SIZE HOLE 7 7/8 DRILL PIPE 4 1/2 x hole
 REMARKS: SIZE PUMP LINERS 6 LENGTH STROKE 15

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2900	20	24	4
	27	3	
	29	2	
	31	2	
5	35	4	
	39	4	
	44	5	
	48	4	
	53	5	
10	57	4	
	11:02	5	
	4	2	
	6	2	
	8-	2-	
15	12	3-	
	16	4	
	20	4	
	24	4	
	27	3	
20	30	3	
	33	3	
	43/46	3	
	49	3	
	51	2	
25	54	3	
	57	3	
	1200	3	
	3	3	
	6-	3-	
30	10	3-	
	13	3	
	17	4	
	20	3	
	23-	3 1/2	
35	27	3 1/2	
	30 1/2	3 1/2	
	34 1/2	3 1/2	
	38 1/2	4 1/2	
	41 1/2	3	
40	44 1/2	3	
	47 1/2	3	
	51	3 1/2	
	53 1/2	2 1/2	
	56 1/2	3	
45	11:00	3 1/2	
	03	3	
	07	4	
	11	4	
	14 1/2	3 1/2	
	18 1/2	3 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
51	18	3	
	21	3 1/2	
	26 1/2	2 1/2	
	32	3	
	35	3	
55	38	3	
	41 1/2	3 1/2	
	44 1/2	3	
	48	3 1/2	
	50	2	Heeb.
60	52	2	
	53	1	
	55	2	
	2:00	5	
	05	5	
65	08 1/2	3 1/2	
	11 1/2	3	
	14	2 1/2	
	16	2	
	18 1/2	2 1/2	
70	20	1 1/2	
	21	1	
	24	3	
	26 1/2	2 1/2	
	30	3 1/2	
75	33	3	
	37	4	
	40	3	
	43 1/2	3 1/2	
	47	3 1/2	
80	50	3	
	52 1/2	2 1/2	
	56	3-	Conn
	2/5	3	
	08	3	
85	11	3	
	14 1/2	3 1/2	
	18	3 1/2	
	22	4	
	25	3	
90	27 1/2	2 1/2	x Douglas
	29 1/2	2	
	31 1/2	2	
	33 1/2	2	
	35 1/2	2	
95	37	1 1/2	
	39	2	
	42	3	
	44 1/2	2 1/2	
	48	3 1/2	
5000	50 1/2	2 1/2	

COMPANY McNEISH Oil FARM Eatinger WELL NO. 2
 SEC. TWP. RGE. LOC. 29-20-11 COUNTY Barton STATE Ks
 CONTRACTOR _____ SIZE HOLE 7 7/8 DRILL PIPE 4 1/2 x hole
 REMARKS: _____ SIZE PUMP LINERS 6 LENGTH STROKE 15

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3000 61	50 50	2 2	
	56	3	
	59	3	
	4:02	3	
05	05	3	
	08	3	
	11	3	
	13 1/2	2 1/2	
	16	2 1/2	
10	19	3	
	22	3	
	25	3	Conn
	30 30	3	
	35	2	
15	37	2	
	39 1/2	2 1/2	
	41 1/2	2	
	44	2 1/2	
	46	2	
20	48	2	
	50	2	
	52	2	
	54	2	
	56	2	
25	58	2	
	5:00	2	
	02	2	
	04	2	
	6	2	
30	7-	1-	
	9	1-	
	11 1/2	2 1/2	
	13 1/2	2	
	15 1/2	2	
35	17 1/2	2	
	20	2-	
	22	2	
	24	2	
	27	2	
40	29	2	
	32	3	
	34	2	
	36	2	
	38	2	Conn
45	41/44	3	
	46	2	
	48	2	
	50	2	
	52	2	
50	56	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
50 51	55 55	2 2	
	59	2	
	6:02	3	
	4	2	
55	6	2	
	9	3	
	11	2	
	14	3	
	16	2	
60	18	2	
	21	3	
	23	2	
	26	3	
	28	2	
65	30	3	
	33	2	
	36	3	
	38	2	
	40	2	
70	42	2	
	45	3	
	47	2	
	49	2	
	51/53	2	
75	55	2	
	57	2	
	59	2	
	7:01	2	
	3	2	
80	5	2	
	7	2	
	9	2	
	10	1-	
	12	1-	
85	4	2	
	6	2	
	18	2	
	20	2	
	24	4	B. Line
90	28	4	
	32	4	
	36	4	
	40	4	
	43	3	
95	46	3	
	50	4	
	52	2	
	5	3	
	57	2	
300	8AM	3	Call you

COMPANY McNEISH OIL FARM Eatinger WELL NO. 2
 SEC. TWP. .RGE. LOC. 29-20-11 COUNTY Barton STATE Ks
 CONTRACTOR L.D. SIZE HOLE 7 7/8 DRILL PIPE 4 1/2 x hole
 REMARKS: SIZE PUMP LINERS 6 LENGTH STROKE 15

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3101	2	5	3
	8	3	
	11	3	
	14	3	41 vis
	16	2	9 wt
	28	2	11 w.l.
	30	2	11 ph
	32	2	7,000 chl.
	35	3	
10	38	3	mud cost
	42	4	1475. +
	45	3	trucking
	49	4	
	53	4	
	56	3	
	59	3	
	902	3	
	4	2	
	6	2	
20	8	2	
	11	3	
	14	3	
	17	3	
	21	4	
	5	4	
	28	3	
	32	4	
	35	3	
	38	3	
30	41	3	
	4	3	
	48	4	
	51	3	
	4	3	
	58	4	
	1001	3	
	316	3	
	10	4	
	12	2	
40	4	2	
	17	3	
	20	3	
	3	3	
	26	3	
	29	3	
	32	3	
	5	3	
	38	3	
	41	3	
	44	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3151	47	3	
	51	4	
	54	3	
	57	3	
	11AM	3	
	2	2	
	4	2	
	7	3	
	10	3	
60	13	3	
	15	2	
	18	3	
	20	2	
	23	3	
	26	3	
	29	3	
	32/35	3	
	38	3	
	42	4	
70	45	3	odor
	48	3	
	50	2	
	2	2	
	55	3	
	58	3	
	1201	3	
	5	4	
	8	3	
	11	3	
80	14	3	
	17	3	
	18-	1-	
	20	1-	
	2	2	
	4	2	
	5	1	
	27	2	
	29	2	
	32	3	
90	35	3	
	38	3	
	41	3	
	4	3	
	47	3	
	50	3	
	4	4	
	57	3	
	101	3	
	6	3	
3200	8	2	

COMPANY _____ FARM _____ WELL NO. _____
 SEC. TWP. RGE. LOC. COUNTY STATE
 CONTRACTOR _____ SIZE HOLE _____ DRILL PIPE _____
 REMARKS: _____ SIZE PUMP LINERS _____ LENGTH STROKE _____

DATE _____

DEPTH	TIME O'CLOCK	MIN.	REMARKS
320	9-	1-	
	11	1-	
	13	2	
	15	2-	42 vis
	18	2-	9 wt
	21	3	11 WL
	4	3	11 ph
	27	3	6000 chl
	30	3	
10	3	3	
	6	3	
	39	3	
	42	3	
	5	3	
	48	3	
	51	3	
	4	3	
	6	2	
	59	3	
20	702	3	
	5	3	
	8	3	
	11-	3-	
	14-	3	
	18	3-	
	21	3	
	4	3	
	26-	2-	11' ANCHOR
	30/32	2	CALL CRAIG
30	33-	1-	TOO LATE
	5-	2	WHEN
	36	1-	
	37	1	
	38-	1-	
	41	2-	
	42	1	
	43	1	
	43-	1	
	45-	2	
40	48/4	3	CFS 20-40
	48/46	3	
	49	3	
	52	3	
	56	4	
45	4.00	4	
	4	4	
	8	4	
	11	3	
	14	3	
350	17	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3250	17	21	4
51	24	3	
	27	3	
	30	3	
55	33	3	
	35	2	
	37	2	
	40	3	
	42	2	
60	46	2	CONN
	51	3	hard adre
	55	4	
	59	4	
	5:04	5	
65	8	4	
	12	4	
	16	4	
	19	3	
	23	4	
70	28	5	
	32	4	
	36	4	
	40	4	
	45	5	
75	49	4	
	53	4	
	57	4	
	6:01	4	Vis 43 wt 9.4
	05	4	WL 12.6 Ph 9
80	8	3	chl 6000
	11	3	
	3	2	
	16	3	
	20	4	
85	4	4	
	28	4	
	32	4	
	36	4	
	39	3	
90	41/50	3	
	3	3	
	20/3	3	
	27	3	
	31	4	
95	4	3	
	6	2	
	39	3	
	41-	2-	
	3-	2	
3300	46	2-	CALL Geol.

T.M. CRAIG

COMPANY _____ FARM _____ WELL NO. _____
 SEC. TWP. RGE. LOC. COUNTY STATE
 CONTRACTOR _____ SIZE HOLE _____ DRILL PIPE _____
 REMARKS: _____ SIZE PUMP LINERS _____ LENGTH STROKE _____

DATE _____

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3000 01	46	2	
	51	2	
	54	3	
	57	3 1/2	
	8:01	3 1/2	42. VIS
	04	3	93 Wt
	8	4	12.8 WL
	11	3	7000 chl.
	4	3	85 ph
10	17	3	
	20	3	
	4	3	6147 6105
	27	3	6238 6235
	31	4	6265 6195
	4	3	6196 6075
	37	3	6120 6210
	41	4	6247 6245
	44	3	32213 6135
	48	4	432 -
20	52	4	
	5	3	6265 6070
	7	3	6140 62 -
	11	4	6265 6245
	15	4	6275 6175
	19	4	6275 6210
	23	4	6275 6275
	27	4	6275 6220
	31	4	6265 6265
	35	4	49675 49560
30	38	3	
	41	3	6230 6265
	4	3	6265 6130
	48	4	6180 6280
	52	3	6104 6265
	55	3	6150 6175
	57	2	6085 31115
	59	2	6220
	1001	2	6190
	4	2	49364
40	6	2	
	8	1	6174
	10	2	6240
	11	1	61 -
	14	2	6220
	16	2	24735
	20	3	284862
	12/6	2	53635
	11	1	338497
	10	1	338275
50	20	2	222

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3300 51	23	3	
	25	2	
	32/34	2	
	37	3	
	40	3	
	42	2	
	44	2	
	47	3	
	42/45	2	
600	49	4	
	51	2	
	53	2	
	56	2	
	58	2	
	1201	3	
	3	2	
	6	3	
	9	3	25
	11	2	
70	14	2	
	17	3	
	21	4	
	24	3	
	27	3	
	30	3	
	32	2	
	35	3	30
	39	3	
	42	3	
80	44	2	
	47	3	
	49	2	
	51	2	conn
	100/2	2	
	4	2	
	5	1	
	7	2	20
	9	2	
	11	2	Vis 45 AT 9.5
90	13	2	WL 13.6 PH 9.0
	15	2	chl 7000
	17	2	
	19	2	
	22	3	
	25	3	
	27	2	14
	30	3	
	32	2	
	34	2	
3400	37	3	

DATE _____

[illegible][illegible]