DIAMOND TESTING

Pressure Survey Report

General Information

Company Name Well Name Unique Well ID Surface Location Field GRAND MESA OPERATING COMPANY Job Number HESS 2-23 Representative DST#5 4536-4590 JOHNSON Well Operator

SEC.23-12S-32W LOGAN CO.KS. Report Date
WILDCAT Prepared By
Vertical Qualified By
Test Unit

M511 MIKE COCHRAN GRAND MESA OPERATING COMPANY 2013/06/07 MIKE COCHRAN KENT MATSON NO. 1

Test Information

Well Type

Test Type Formation Test Purpose (AEUB) CONVENTIONAL DST#5 4536-4590 JOHNSON Initial Test

Start Test Date Final Test Date

2013/06/07 Start Test Time 2013/06/07 Final Test Time Well Fluid Type 10:00:00 20:35:00 01 Oil

Gauge Name Gauge Serial Number 0063

Test Results

Remarks RECOVERED:

 $\bf 30'$ GWM 1% GAS, 19% WTR, 80% MUD W/ A THIN SCUM OF OIL 238' GMW 2% GAS, 83% WTR 15% MUD W/ SOME SPOTS OF OIL $\bf 268'$ TOTAL FLUID

CHLOR: 32,000 PPM PH:7.0

RW: .22 @ 79 DEG

TOOL SAMPLE: 2% GAS, 88% WTR, 10% MUD W/ A THIN SCUM OF OIL



DIAMOND TESTING P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

DRILL-STEM TEST TICKET

TIME ON: 1000 TIME OFF: 2035

FILE: HSS2-2	23DST5
Company GRAND MESA OPERATING COMPANY	Lease & Well No. HESS 2-23
	Charge to GRAND MESA OPERATING COMPANY
Elevation 2972 KB Formation JOHNSO	N Effective PayFt. Ticket NoM511
	angeS2 W CountyLOGANStateKANSAS
Test Approved By KENT MATSON	Diamond Representative MIKE COCHRAN
Formation Test No. 5 Interval Tested from 45	36 ft. to 4590 ft. Total Depth 4590 ft.
Packer Depth 4531 ft. Size 6 3/4 in.	Packer depthN/A ft. Size 6 3/4 in.
Packer Depth 4536 ft. Size 6 3/4 in.	Packer depthNA ft. Size6 3/4 in.
Depth of Selective Zone Set	
Top Recorder Depth (Inside) 4518 ft.	Recorder Number0063 Cap6,000 P.S.I.
Bottom Recorder Depth (Outside) 4587_ft.	Recorder Number 6884 Cap. 6,275 P.S.I.
Below Straddle Recorder Depthft.	Recorder NumberCapP.S.I.
Mud Type CHEM Viscosity 48	Drill Collar Length 238 ft. I.D. 2 1/4 in.
Weight 9.4 Water Loss 6.0 cc.	Weight Pipe Length ft. I.D 2 7/8 in
Chlorides 2,000 P.P.M.	Drill Pipe Length 4266 ft. I.D 3 1/2 in
Jars: Make STERLING Serial Number 1	Test Tool Length 32 ft. Tool Size 3 1/2-IF in
Did Well Flow? NO Reversed Out NO	Anchor Length 54 ft. Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.	(31'dp) Surface Choke Size 1 in. Bottom Choke Size 5/8 in
Blow: 1st Open: WSB, INC. TO 4" (NO BB)	
2nd Open: NO BLOW, THEN AFTER 41/2 MIN A VW	/SB, INC. TO 5" (NO BB)
Recovered 30 ft. of GWM 1% GAS, 19% WTR, 80% MUD W/ A THIN SCUM OF OIL	
Recovered 238 ft. of GMW 2% GAS, 83% WTR 15% MUD W/ SOME SPOTS OF OIL	
Recovered 268 ft. of TOTAL FLUID	
Recoveredft. of	
Recoveredft. of CHLOR: 32,000 PPM	Price Job
Recoveredft. of RW: .22 @ 79 DEG	Other Charges
Remarks: PH: 7.0	Insurance
TOOL SAMPLE: 2% GAS, 88% WTR, 10% MUD W/ A THIN SCUM OF OIL Total	
Time Set Packer(s) 1:45 P.M. A.M. P.M. Time Started Off Bottom 5:30 P.M. A.M. P.M. Maximum Temperature 126	

Final Hydrostatic Pressure..... Diamond Testing 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, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

(D)

(G)

30

45

60

90

Initial Hydrostatic Pressure.....(A)

Initial Closed In Period...... Minutes

Final Closed In Period......Minutes

2193 P.S.I.

927 _{P.S.I.}

919 P.S.I.

2178 P.S.I.

10 P.S.I. to (C)_

76 P.S.I. to (F)

69 P.S.I.

134 _{P.S.I.}

GRAND MESA OPERATING COMPANY DST#5 4536-4590 JOHNSON

Start Test Date: 2013/06/07 Final Test Date: 2013/06/07

HESS 2-23

HESS 2-23 Formation: DST#5 4536-4590 JOHNSON

Pool: WILDCAT Job Number: M511

