FORM REPRODUCED UNDER
LICENCE FROM IADC
(PASON SYSTEMS CORP. EXPIRES 31 DEC 2008)

DAILY DRILLING REPORT

REPORT NO. ENSIGN17_20081107_1D

LEASE	WELL NO.	API WELL NUMBER	WATER DEPTH	DATE	FIELD OR DISTRICT	COUNTY	STATE / COUNTRY
VETTING	2	05-123-25284-00	0	11/7/2008	NENW SEC 23 T5N R65W	Weld	CO/U.S.

OPERATOR	CONTRACTOR	RIG NO.
MINERAL RESOURCES, INC.	ENSIGN US DRILLING	17
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S REPRESENTATIVE	
	LEWIS W. GENTRY	

D.P. SIZE	WEIGHT	GRADE	TOOL JT OD	TYPE	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.5	NC40	5.25	FH	1	1	MUDDER MD-9	PZ-9	9

LAST CASING TUBING OR LINER	SIZE	MAKE	WEIGHT	GRADE	NO. JOINTS	LENGTH	RKB TO CSG HEAD	SET AT
	8 5/8	LT&C	24	J-5	11	474	12	486

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	LENGTH SLIPPED

LENGTH CUT OFF | PRESENT LENGTH

WEAR OR TRIPS SINCE LAST CUT

CUMULATIVE WEAR OR TRIPS

DRILLING CREW PAYROLL DATA

Date: 11/7/2008
Well Name & No.: VETTING #2
Company: ENSIGN US DRILLING
Toolpusher: LEWIS W. GENTRY Rig No: 17

MORNING TOUR — FROM 600 TO 1400

CREW	EMPL. ID NO.	NAME	HOURS	INITIAL	INJURED THIS TOUR ? YES / NO
DRILLER		ELBERT GENTRY	8.50	EG	NO
RELIEF DRILLER		SANTOS VEGA	8.50	SV	NO
DERRICK MAN		ALEJANDRO GARCIA	8.50	AG	NO
MOTOR MAN		CHRISTOPHER LIENHARD	8.50	CL	NO
FLOOR HAND		JAMES BAKER	8.50	JB	NO
FLOOR HAND		LENI SALO	8.50	LS	NO
M-RIG MANAGER		LEWIS W GENTRY	1.00	LWG	NO

NO. OF DAYS SINCE LOST TIME ACCIDENT: 701 OIL BASED MUD: ☐

DAY TOUR — FROM 1400 TO 2200

CREW	EMPL. ID NO.	NAME	HOURS	INITIAL	INJURED THIS TOUR ? YES / NO
DRILLER		GARRY CHAPMAN	8.50	GC	NO
DERRICK MAN		GUMARO DE LA TRINIDAD	8.50	GT	NO
MOTOR MAN		CRAIG S. JURGENS	8.50	CSJ	NO
FLOOR HAND		LU-TEJOHN KIEONN BALDWIN	8.50	LKB	NO
TRAINEE		GABRIEL RAMOS-MENDOZA	8.50	GRM	NO

NO. OF DAYS SINCE LOST TIME ACCIDENT: 701 OIL BASED MUD: ☐

EVENING TOUR — FROM 2200 TO 600

CREW	EMPL. ID NO.	NAME	HOURS	INITIAL	INJURED THIS TOUR ? YES / NO
DRILLER		MICHAEL DAVID	8.50	MD	NO
DERRICK MAN		CRUZ MEDERA	8.50	CM	NO
MOTOR MAN		JEFFERY P. HARRINGTON	8.50	JH	NO
FLOOR HAND		VALENTE MEDERA	8.50	VM	NO

NO. OF DAYS SINCE LOST TIME ACCIDENT: 701 OIL BASED MUD: ☐

TIME DISTRIBUTION - HOURS

CODE No. - OPERATION	MORN.	DAY.	EVE.
1. RIG UP & TEAR DOWN			
2. DRILL ACTUAL			1.5
3. REAMING			
4. CORING			
5. COND MUD & CIRC	0.75		
6. TRIPS	1.0	2.5	0.75
7. LUBRICATE RIG			0.25
8. REPAIR RIG			
9. CUT OFF DRILL LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT	2.5		
13. WAIT ON CEMENT	3.75	0.25	
14. NIPPLE UP B.O.P.		4.0	
15. TEST B.O.P.		0.25	0.5
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK		1.0	5.0
21.			
22.			
23.			
COMPLETION: A. PERFORATING			
B. TUBING TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F.			
G.			
H.			
TOTALS	8.00	8.00	8.00

DAYWORK TIME SUMMARY (OFFICE USE ONLY)

HOURS W /CONTR. D.P.			
HOURS W /OPR. D.P.			
HOURS WITHOUT D.P.			
HOURS STANDBY			
TOTAL DAYWORK			

NO. DAYS FROM SPUD

CUMULATIVE ROTATING HOURS

DAILY MUD COST

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.	ITEM	LENGTH
1	BIT	1.00
1	MOTOR	28.64
1	U.B.H.O. SUB	2.84
1	MONEL	31.00
1	MONEL	31.15
1	X.O.	2.51
9	H.W.D.P.	276.24

DRILLPIPE STANDS / DRILLPIPE SINGLES

KELLY DOWN 45.00
TOTAL 418.18
WT. OF STRING 39000

RAN 11 JTS 8 5/8" 24# CSG @ 474' SET @ 486' KB
CEM W/217 SKS TYPE III , PLUG DOWN @ 1015 11-07-08
CIRC 5 BBLS CEMENT TO RESERVE PIT.

BIT RECORD

BIT NO.	2
SIZE	7 7/8
IADC CODE	M 4 3 4
MANUFACTURER	SEC
TYPE	FMH35452M
SERIAL NO.	11257000
JETS	7 X14
TFA	
DEPTH OUT	
DEPTH IN	498
TOTAL DRILLED	
TOTAL HOURS	

CUTTING STRUCTURE

INNER	OUTER	DULL CHAR	LOCATION
BRG / SEALS	GAGE	OTHER DULL	REASON

MUD RECORD

TIME
MUD WT
GRADIENT
FUNNEL VIS
PV / YP
GEL STR
FLUID LOSS
pH
SOLIDS

MUD & CHEMICALS ADDED

TYPE	AMOUNT

DRILLER: ELBERT GENTRY

DEPTH INTERVAL FROM	TO	DRILL REAM CORE	CORE NO.	FORMATION (SHOW RECOVERY)	ROTARY TABLE SPEED	WEIGHT ON BIT	PUMP PRESSURE	PUMP NO. 1 LINER SIZE / SPM	PUMP NO. 2 LINER SIZE / SPM	PUMP NO. 3 LINER SIZE / SPM	PUMP NO. 4 LINER SIZE / SPM	TOTAL PUMP OUTPUT
498								6				

DEVIATION RECORD

DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
600	615	0.25	5	CIRCULATE
615	715	1.00	6	TRIP OUT
715	845	1.50	12	RUN CASING
845	915	0.50	5	CONDITION MUD & CIRCULATE
915	1015	1.00	12	CEMENT
1015	1400	3.75	13	WAIT ON CEMENT

DRILLING ASSEMBLY (At end of tour)

NO.	ITEM	LENGTH
1	BIT	1.00
1	MOTOR	28.64
1	U.B.H.O. SUB	2.84
1	MONEL	31.00
1	MONEL	31.15
1	X.O.	2.51
9	H.W.D.P.	276.24

DRILLPIPE STANDS / DRILLPIPE SINGLES

KELLY DOWN 45.00
TOTAL 418.18
WT. OF STRING 39000

CK CROWN-O-MATIC
JSA'S RO# 59,60,15,10 ...3 STOP CARDS
SAFETY MEETING ON NIPPLING UP B.O.P..

BIT RECORD

BIT NO.	2
SIZE	7 7/8
IADC CODE	M 4 3 4
MANUFACTURER	SEC
TYPE	FMH35452M
SERIAL NO.	11257000
JETS	7 X14
TFA	
DEPTH OUT	
DEPTH IN	498
TOTAL DRILLED	
TOTAL HOURS	

CUTTING STRUCTURE

INNER	OUTER	DULL CHAR	LOCATION
BRG / SEALS	GAGE	OTHER DULL	REASON

MUD RECORD

TIME
MUD WT
GRADIENT
FUNNEL VIS
PV / YP
GEL STR
FLUID LOSS
pH
SOLIDS

MUD & CHEMICALS ADDED

TYPE	AMOUNT

DRILLER: GARRY CHAPMAN

DEPTH INTERVAL FROM	TO	DRILL REAM CORE	CORE NO.	FORMATION (SHOW RECOVERY)	ROTARY TABLE SPEED	WEIGHT ON BIT	PUMP PRESSURE	PUMP NO. 1 LINER SIZE / SPM	PUMP NO. 2 LINER SIZE / SPM	PUMP NO. 3 LINER SIZE / SPM	PUMP NO. 4 LINER SIZE / SPM	TOTAL PUMP OUTPUT
498								6				

DEVIATION RECORD

DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1400	1415	0.25	13	WAIT ON CEMENT/RIG SERVICE
1415	1815	4.00	14	NIPPLE UP B.O.P.
1815	1830	0.25	15	TEST B.O.P. @ 500 P.S.I TEST GOOD
1830	1900	0.50	6	TRIP IN HOLE TO LDDC
1900	2000	1.00	6	LDDC
2000	2100	1.00	20	DIR. WORK/PICK UP M.M. & TOOLS
2100	2200	1.00	6	TRIP IN HOLE/FIND PLUG

DRILLING ASSEMBLY (At end of tour)

NO.	ITEM	LENGTH
1	BIT	1.00
1	MOTOR	28.64
1	U.B.H.O. SUB	2.84
1	MONEL	31.00
1	MONEL	31.15
1	X.O.	2.51
9	H.W.D.P.	460.37

DRILLPIPE STANDS / DRILLPIPE SINGLES

KELLY DOWN 45.00
TOTAL 602.31
WT. OF STRING 39000

CHECKED CROWN O MATIC/REVIEWED JSA RO-39
SAFETY MEETING ON PRE TRIP INSPECTION/BOP DRILL @ 2330/FUEL 46"

BIT RECORD

BIT NO.	2
SIZE	7 7/8
IADC CODE	M 4 3 4
MANUFACTURER	SEC
TYPE	FMH35452M
SERIAL NO.	11257000
JETS	7 X14
TFA	
DEPTH OUT	
DEPTH IN	498
TOTAL DRILLED	104
TOTAL HOURS	1.5

CUTTING STRUCTURE

INNER	OUTER	DULL CHAR	LOCATION
BRG / SEALS	GAGE	OTHER DULL	REASON

MUD RECORD

TIME
MUD WT
GRADIENT
FUNNEL VIS: H 2 O
PV / YP
GEL STR
FLUID LOSS
pH
SOLIDS

MUD & CHEMICALS ADDED

TYPE	AMOUNT

DRILLER: MICHAEL DAVID

DEPTH INTERVAL FROM	TO	DRILL REAM CORE	CORE NO.	FORMATION (SHOW RECOVERY)	ROTARY TABLE SPEED	WEIGHT ON BIT	PUMP PRESSURE	PUMP NO. 1 LINER SIZE / SPM	PUMP NO. 2 LINER SIZE / SPM	PUMP NO. 3 LINER SIZE / SPM	PUMP NO. 4 LINER SIZE / SPM	TOTAL PUMP OUTPUT
498	602	D		SHALE	55	6	700	6	117			

DEVIATION RECORD

DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.	DEPTH	DEV.	DIR.	TVD	HORIZ. DISPL.

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
2200	2215	0.25	15	TEST B.O.P. @ 500 PSI
2215	2230	0.25	7	LUBRICATE RIG
2230	2245	0.25	15	TEST B.O.P. ANNULAR @ 600 PSI
2245	0015	1.50	2	DRILL PLUG & FROM 498 TO 602
0015	0030	0.25	6	TRIPS
0030	0530	5.00	20	DIR. WORK
0530	0600	0.50	6	TRIP