APPENDIX 2

MACINTYRE-2H
MUD LOG 1:500

NOTE: mud log 1:200, support data and drill log are located in Enclosure 1
MASTER LOG
MACINTYRE-2H

Field: MACINTYRE
Permit: EP-127
State: NT
Country: AUSTRALIA
Scale: 1/500

Rotary Table: 385.8mAHD
Ground Level: 380.7mAHD
Datum: GDA 94
Lat.: 22° 02' 23.33"S
Long.: 135° 32' 06.99"E

Rig: ENSIGN 918
Spud Date: 06-06-2012
TD Date: 23-06-2012
Total Depth: 1916.0m
Final Status: CASED & SUSPENDED

ROP (m/hr)
0 25 50
WOB (klbs)
0 175 350
Gr (api)
0 175 350

LITHOLOGY
Medium sand
Cement
Siltstone
Carb Siltstone
Shale
Limestone
Dolomite
Silty Limestone
Silty Dolomite
Anhydrite

ACCESSORIES
Pyrite
Glaucnite
Mica
Chert
Fossils
Iron
Breccia
Argillaceous
Carbonaceous
Foraminifera

DRILLING DATA
Casing shoe
Deviation survey
Dist
Core
Wiper Trip

MUD DATA
MW - Mud Weight (lb/gal)
FV - Funnel Viscosity (s/qt)
PV - Plastic Viscosity (cps)
YP - Yield Point (lb/100ftsq)
Gel - Gel Strength (10sec)
WL - Water Loss (cc/30min)
pH - Acidity / Alkalinity
Ck - Cake (32nd/inch)
Sol - Solids (% vol)
Cl - Chlorides (mg/l)

ENGINEERING COMMENTS
First attempt to kick off fail.
MW: 8.4
FV: 45
PV: 13
YP: 13

GEOLOGICAL DESCRIPTIONS
CEMENT

ABBREVIATIONS
BOPD - Barrels of Oil Per Day
BWPD - Barrels of Water Per Day
CG - Connection Gas
CO - Circulate Out
COND - Condensate
c/c - Crush Cut
DST - Drill Stem Test
ROP - Rate Of Penetration
FV - Flow Rate (gal/min)
GCM - Gas Cut Mud
GCW - Gas Cut Water
GTS - Gas To Surface
INJ - Injection of Mist (bbls/hr)
LCM - Lost Circulation Material
MMCFD - Million Cubic Feet / Day
NGTS - No Gas To Surface
NOTS - No Oil To Surface
OC - Circulate Out
OG - Over Gauge
OH - Open Hole
OS - Oil Cut Surface
OTM - Oil To Surface
Rmf - Resistivity mud filtrate
RPM - Revolutions Per Minute
RTST - Rate Too Small To Measure
SCFM - Standard Cubic Ft/Min (air)
SGCM - Slightly Gas Cut Mud
SPM - Strokes Per Minute
SWC - Side-Wall Core
TG - Trip Gas
WOB - Weight On Bit

ROTARY TABLE: 385.8mAHD
SURVEY@1367.0m 98.6°AZI 89.0°INC
SLTST: dk grysh brn-brnsh blk, ea lstr, v arg grdl w/ v slty CLST or Shlfr, fm-mod hd, sbfiss-sbbky, tr petr odor, no shows.

SURVEY@1376.5m 98.6°AZI 89.0°INC
SHL: v dk grysh brn-brnsh blk, rsns lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod calc, mod hd, plty, loc sbfiss, tr calcite vn w/pyr.

SURVEY@1386.4m 98.7°AZI 89.9°INC
SHL: v dk grysh brn-brnsh blk, rsns lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod calc, mod hd, plty, loc sbfiss, tr calcite vn w/pyr.

SURVEY@1395.9m 99.0°AZI 89.5°INC
SHL: v dk grysh brn-brnsh blk, rsns lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod calc, mod hd, plty, loc sbfiss, tr calcite vn w/pyr.

SURVEY@1405.4m 99.0°AZI 89.8°INC
SLTST: dk grysh brn-brnsh blk, v arg grdl w/ v slty clst or shl.

SURVEY@1415.2m 99.0°AZI 89.9°INC
45/35/15/4/1
SLTST: dk grysh brn-brnsh gry, ea lstr, v arg grdl w/ arg slty clst, i/p w/ dissem org mat, slty g/t v calc, sly-mod hd.

SURVEY@1424.7m 99.0°AZI 89.8°INC
SHL: v dk grysh brn-brnsh blk, resinos lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod calc, sly-mod hd, plty, loc sbfiss, tr calcite vn w/pyr.

SURVEY@1434.2m 99.0°AZI 89.9°INC
SLTST: dk grysh brn-brnsh gry, v arg grdl w/ arg slty clst, i/p w/ dissem org mat, slty g/t v calc, sly-mod hd.

SURVEY@1444.0m 99.0°AZI 89.5°INC
SHL: v dk grysh brn-brnsh blk, resinos lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod calc, sly-mod hd, plty, loc sbfiss, tr calcite vn w/pyr.

SURVEY@1454.0m 99.0°AZI 89.9°INC
SLTST: dk grysh brn-brnsh gry, v arg grdl w/ arg slty clst, i/p w/ dissem org mat, slty g/t v calc, sly-mod hd.

SURVEY@1463.3m 99.0°AZI 90.0°INC
58/27/11/3/1
SLTST: dk grysh brn-brnsh gry, v arg grdl w/ arg slty clst, i/p w/ dissem org mat, slty g/t v calc, sly-mod hd.

SURVEY@1472.9m 99.0°AZI 90.0°INC
64/23/9/3/1
SLTST: dk grysh brn-brnsh gry, v arg grdl w/ arg slty clst, i/p w/ dissem org mat, slty g/t v calc, sly-mod hd.

SURVEY@1482.6m 99.0°AZI 90.0°INC
70/19/8/2/1
SLTST: dk grysh brn-brnsh blk, olv brn, resinos lstr due to dissem btns mat, sil-loc v slty, up grdg to v arg btns sltst, scat mic flks, mod hd, calc, sly-mod hd, plty, loc sbfiss, tr calcite vn w/pyr.