

**PLANNING APPLICATION FOR DEVELOPMENT RELATING TO THE
ONSHORE EXTRACTION OF OIL AND GAS**

PLANNING APPLICATION FORM CONTINUATION SHEET

QUESTION 7 – PLANS DRAWING S AND OTHER SUPPORTING MATERIAL. CONTINUED

REFERENCE NUMBER	TITLE
ZG-AER-ALT-PA-05	EXISTING LAYOUT PLAN 2 OF 6)
ZG-AER-ALT-PA-06	EXISTING LAYOUT PLAN (3 OF 6)
ZG-AER-ALT-PA-07	EXISTING LAYOUT PLAN (4 OF 6)
ZG-AER-ALT-PA-08	EXISTING LAYOUT PLAN (5 OF 6)
ZG-AER-ALT-PA-09	EXISTING LAYOUT PLAN (6 OF 6)
ZG-AER-ALT-PA-10	PROPOSED CONSTRUCTION LAYOUT (COMPOSITE)
ZG-AER-ALT-PA-11	PROPOSED CONSTRUCTION LAYOUT (1 FO 6)
ZG-AER-ALT-PA-12	PROPOSED CONSTRUCTION LAYOUT (2 OF 6)
ZG-AER-ALT-PA-13	PROPOSED CONSTRUCTION LAYOUT (3 OF 6)
ZG-AER-ALT-PA-14	PROPOSED CONSTRUCTION LAYOUT (4 OF 6)
ZG-AER-ALT-PA-15	PROPOSED CONSTRUCTION LAYOUT (5 OF 6)
ZG-AER-ALT-PA-16	PROPOSED CONSTRUCTION LAYOUT (6 OF 6)
ZG-AER-ALT-PA-17	SECTION THROUGH PROPOSED WELLSITE CONSTRUCTION
ZG-AER-ALT-PA-18	CONDUCTOR SETTING LAYOUT
ZG-AER-ALT-PA-19	SECTION THROUGH CONDUCTOR SETTING
ZG-AER-ALT-PA-20	DRILLING PHASE LAYOUT
ZG-AER-ALT-PA-21	SECTION THROUGH DRILLING PHASE
ZG-AER-ALT-PA-22	HYDRAULIC FRACTURE STIMULATION PHASE LAYOUT
ZG-AER-ALT-PA-23	SECTION THROUGH HYDRAULIC FRACTURE STIMULATION PHASE
ZG-AER-ALT-PA-24	INITIAL FLOW TEST PHASE LAYOUT
ZG-AER-ALT-PA-25	SECTION THROUGH INITIAL FLOW TEST PHASE LAYOUT
ZG-AER-ALT-PA-26	EXTENDED WELL TEST PHASE LAYOUT
ZG-AER-ALT-PA-27	SECTION THROUGH EXTENDED WELL TEST PHASE
ZG-AER-ALT-PA-28	WELL ABANDONMENT PHASE LAYOUT
ZG-AER-ALT-PA-29	SECTION THROUGH WELL ABANDONMENT PHASE
ZG-AER-ALT-PA-30	RESTORATION PHASE LAYOUT PLAN (COMPOSITE)
ZG-AER-ALT-PA-31	RESTORATION PHASE LAYOUT PLAN (1 OF 6)
ZG-AER-ALT-PA-32	RESTORATION PHASE LAYOUT PLAN (2 OF 6)
ZG-AER-ALT-PA-33	RESTORATION PHASE LAYOUT PLAN (3 OF 6)
ZG-AER-ALT-PA-34	RESTORATION PHASE LAYOUT PLAN (4 OF 6)
ZG-AER-ALT-PA-35	RESTORATION PHASE LAYOUT PLAN (5 OF 6)
ZG-AER-ALT-PA-36	RESTORATION PHASE LAYOUT PLAN (6 OF 6)
ZG-AER-ALT-PA-37	BOUNDARY FENCING PLAN

QUESTION 8 – EQUIPMENT AND METHOD USED

NO. ON PLAN	EQUIPMENT	NUMBER	MAXIMUM HEIGHT
WELLSITE AND ACCESS TRACK CONSTRUCTION WORKS (DRAWING NO. ZG-AER-AM-PA-10 to ZG-AER-AM-PA-16)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	AER SECURITY OFFICE	1	2.60M
AS SHOWN	WELFARE UNIT	2	2.60M
AS SHOWN	LOCKABLE STORES	2	2.60M
AS SHOWN	DIESEL TANK	1	1.50M
VARIOUS	360 EXCAVATOR (MAX BOOM HEIGHT)	1	11.00M
VARIOUS	DUMPER TRUCK	2	2.80M
VARIOUS	LARGE ROLLER	1	2.80M
VARIOUS	D5 TRACKED DOZER	1	2.80M
VARIOUS	MINI DIGGER	1	6.00M
VARIOUS	ROLLER	2	2.60M
VARIOUS	TARMAC PAVING MACHINE	1	3.90M
VARIOUS	PILING RIG	1	22.90M
VARIOUS	LAND DRAINAGE TRENCHING MACHINE	1	2.60M
AS SHOWN	PORTABLE LIGHTING TOWER	2	9.00M
DRILLING AND CORING OF VERTICAL AND HORIZONTAL BOREHOLES (DRAWING NO. ZG-AER-AM-PA-18 & ZG-AER-AM-PA-20)			
CONDUCTOR SETTING (ZG-AER-AM-PA-18)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	CONDUCTOR SETTING RIG	1	8.00M
AS SHOWN	CATWALK	1	1.00M
AS SHOWN	PIPE RACKS	2	1.00M
AS SHOWN	FUEL BUND	1	1.80M
AS SHOWN	COMPRESSOR	1	1.80M
AS SHOWN	DRILLING TANK	1	1.80M
AS SHOWN	WATER STORAGE TANK (INCLUDING HAND RAILS)	1	2.00M
AS SHOWN	SHAKER TANK (INCLUDING SHAKER)	1	2.60M
AS SHOWN	GROUT UNIT	1	1.80M
AS SHOWN	SKIP	1	1.30M
AS SHOWN	FLUID STORAGE TANK	2	3.40M
AS SHOWN	CUTTINGS STORAGE TANK	2	1.80M

AS SHOWN	SYKES PUMP	1	1.50M
AS SHOWN	MUD TRAILER	1	4.00M
AS SHOWN	PORTABLE LIGHTING TOWER	2	9.00M
MAIN DRILLING OPERATION (ZG-AER-AM-PA-20)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	DRILLING CONTRACTOR OFFICE	1	5.80M
AS SHOWN	DRILLING RIG (MAST)	1	60.00M
AS SHOWN	DRILLING RIG (RIG SUBBASE, DOG HOUSE, CHOKE MANIFOLD & RIG FLOOR WIND WALL)	1	11.60M
AS SHOWN	DRILLING RIG (CATWALK)	1	1.0M
AS SHOWN	DRILLING RIG (PIPE RACK)	1	1.0M
AS SHOWN	DRILLING RIG (SWITCH CONTROL ROOM)	1	3.20M
AS SHOWN	DRILLING RIG (GENERATOR) CATERPILLAR 3512b	4	3.90M
AS SHOWN	DRILLING RIG (DIESEL TANK WITH BUND)	2	3.30M
AS SHOWN	DRILLING RIG (COMPRESSOR HOUSE)	1	2.60M
AS SHOWN	DRILLING RIG (TOPDRIVE AC HOUSE)	1	6.50M
AS SHOWN	DRILLING RIG (KOOMEY ROOM)	1	2.60M
AS SHOWN	DRILLING RIG (500 BBL FLUID STORAGE)	2	3.10M
AS SHOWN	DRILLING RIG (MUD TANK)	1	2.70M
AS SHOWN	DRILLING RIG (SETTLING TANK)	1	2.00M
AS SHOWN	DRILLING RIG (SHAKER TANK & SHAKER)	1	4.80M
AS SHOWN	DRILLING RIG (CUTTINGS TANK)	2	2.00M
AS SHOWN	DRILLING RIG (MUD PUMP)	2	3.40M
AS SHOWN	DRILLING RIG (BACK-UP MUD PUMP)	1	3.40M
AS SHOWN	DRILLING RIG (SURGE TANK)	1	5.80M
AS SHOWN	DRILLING RIG (VENT)	1	12.00M
AS SHOWN	PUMP STORE	1	2.60M
AS SHOWN	RIGGING LOFT STORE	1	2.60M
AS SHOWN	GENERAL STORE	1	2.60M
AS SHOWN	MECHANICS WORKSHOP	1	2.60M
AS SHOWN	ELECTRICIAN WORKSHOP	1	2.60M
AS SHOWN	CORE LAB	1	2.60M
AS SHOWN	MUD LOGGERS	1	2.60M
AS SHOWN	MUD TRAILER	2	4.00M
AS SHOWN	500 BBL FLUID STORAGE TANK	3	3.40M
AS SHOWN	200 BBL BASE OIL STORAGE TANK	1	3.40M
AS SHOWN	AER STORE	1	2.60M
AS SHOWN	WASTE OFFICE	1	2.60M

AS SHOWN	DRILL PIPE AND CASING	VARIOUS	<2.50M
AS SHOWN	WELL HEAD	1	
AS SHOWN	PORTABLE LIGHTING TOWER	4	9.00M
HYDRAULIC FRACTURE STIMULATION OF VERTICAL AND HORIZONTAL BOREHOLES (DRAWING NO. ZG-AER-AM-PA-22)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	FLUID STORAGE (ROADABLE TANKS)	13	3.80M
AS SHOWN	ANNULUS PUMP	1	4.00M
AS SHOWN	FRAC PUMP	7	4.00M
AS SHOWN	MANIFOLD	1	1.30M
AS SHOWN	BLENDER	1	4.00M
AS SHOWN	HYDRATION UNIT	1	4.00M
AS SHOWN	C PUMP	1	2.00M
AS SHOWN	GRAVITY SILO	2	8.50M
AS SHOWN	P-SILO	4	13.90M
AS SHOWN	SIR PUMP	1	2.00M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	DATA CENTRE	1	3.90M
AS SHOWN	COIL TUBING (TOWER, INCLUDING INJECTOR)	1	25.00M
AS SHOWN	COIL TUBING (BOP ACCUMULATOR)	1	2.00M
AS SHOWN	COIL TUBING (REEL)	1	3.70M
AS SHOWN	COIL TUBING (CONTROL CABIN)	1	3.10M
AS SHOWN	COIL TUBING (POWER PACK)	1	3.10M
AS SHOWN	COIL TUBING (TOOL HOUSE)	1	2.60M
AS SHOWN	COIL TUBING (WORSHOP)	1	2.60M
AS SHOWN	COIL TUBING (IRON STORE)	1	2.60M
AS SHOWN	N2 CONVERTER	1	2.40M
AS SHOWN	N2 TANKS (2 X DOUBLE STACKED)	2	5.20M
AS SHOWN	WIRELINE TRUCK	1	4.30M
AS SHOWN	WIRELINE TRAILER	1	4.30M
1	SURFACE SAFETY VALVE	1	1.50M
2	SAND FILTER	1	4.10M
3	SAND FILTER	1	3.00M
4	CHOKE MANIFOLD	1	1.10M
5	HEATER	1	2.90M
6	3 PHASE SEPARATOR	1	2.60M
7	DUAL COMPARTMENT SURGE TANK	1	6.10M
8	DUAL COMPARTMENT STOCK TANK	1	2.50M

9	RELIEF KNOCK-OUT POT	1	5.80M
10	GAS SCRUBBER & VENT	1	0.70M
11	GAS KNOCK-OUT	1	4.00M
12	SHROUDED GROUND FLARE	1	12.20M
13	OIL DIVERTER MANIFOLD	1	0.40M
14	ENCLOSED SOLIDS HANDLING TANK	1	3.80M
15	SOLID REMOVAL SILO	1	6.10M
16	WORKSHOP CONTAINER	1	2.60M
17	WELL TEST LAB / DAQ CABIN	1	2.60M
18	GENERATOR	1	1.50M
19	COMPRESSOR	1	1.50M
AS SHOWN	WELLTEST TREE	1	2.0M
AS SHOWN	PORTABLE LIGHTING TOWER	5	9.00M
INITIAL FLOW TESTING OF THE VERTICAL AND HORIZONTAL BOREHOLES (DRAWING NO. ZG-AER-AM-PA-24)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	FLUID STORAGE (ROADABLE TANKS)	13	3.80M
AS SHOWN	COIL TUBING (TOWER, INCLUDING INJECTOR)	1	25.00M
AS SHOWN	COIL TUBING (BOP ACCUMULATOR)	1	2.00M
AS SHOWN	COIL TUBING (REEL)	1	3.70M
AS SHOWN	COIL TUBING (CONTROL CABIN)	1	3.10M
AS SHOWN	COIL TUBING (POWER PACK)	1	3.10M
AS SHOWN	COIL TUBING (TOOL HOUSE)	1	2.60M
AS SHOWN	COIL TUBING (WORSHOP)	1	2.60M
AS SHOWN	COIL TUBING (IRON STORE)	1	2.60M
AS SHOWN	N2 CONVERTER	1	2.40M
AS SHOWN	N2 TANKS (2 X DOUBLE STACKED)	2	5.20M
AS SHOWN	WIRELINE TRUCK	1	4.30M
AS SHOWN	WIRELINE TRAILER	1	4.30M
1	SURFACE SAFETY VALVE	1	1.50M
2	SAND FILTER	1	4.10M
3	SAND FILTER	1	3.00M
4	CHOKE MANIFOLD	1	1.10M
5	HEATER	1	2.90M
6	3 PHASE SEPARATOR	1	2.60M
7	DUAL COMPARTMENT SURGE TANK	1	6.10M
8	DUAL COMPARTMENT STOCK TANK	1	2.50M
9	RELIEF KNOCK-OUT POT	1	5.80M

10	GAS SCRUBBER & VENT	1	0.70M
11	GAS KNOCK-OUT	1	4.00M
12	SHROUDED GROUND FLARE	1	12.20M
13	OIL DIVERTER MANIFOLD	1	0.40M
14	ENCLOSED SOLIDS HANDLING TANK	1	3.80M
15	SOLID REMOVAL SILO	1	6.10M
16	WORKSHOP CONTAINER	1	2.60M
17	WELL TEST LAB / DAQ CABIN	1	2.60M
18	GENERATOR	1	1.50M
19	COMPRESSOR	1	1.50M
AS SHOWN	WELLTEST TREE	1	2.0M
AS SHOWN	PORTABLE LIGHTING TOWER	5	9.00M
EXTENDED WELL TEST OF THE HORIZONTAL BOREHOLE (DRAWING NO. ZG-AER-AM-PA-26)			
AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	FLUID STORAGE (ROADABLE TANKS)	5	3.80M
1	SURFACE SAFETY VALVE	1	1.50M
2	SAND FILTER	1	4.10M
3	SAND FILTER	1	3.00M
4	CHOKE MANIFOLD	1	1.10M
5	HEATER	1	2.90M
6	3 PHASE SEPARATOR	1	2.60M
7	DUAL COMPARTMENT SURGE TANK	1	6.10M
8	DUAL COMPARTMENT STOCK TANK	1	2.50M
9	RELIEF KNOCK-OUT POT	1	5.80M
10	GAS SCRUBBER & VENT	1	0.70M
11	GAS KNOCK-OUT	1	4.00M
12	ENCLOSED GROUND FLARE	2	7.90M
13	OIL DIVERTER MANIFOLD	1	0.40M
14	ENCLOSED SOLIDS HANDLING TANK	1	3.80M
15	SOLID REMOVAL SILO	1	6.10M
16	WORKSHOP CONTAINER	1	2.60M
17	WELL TEST LAB / DAQ CABIN	1	2.60M
18	GENERATOR	1	1.50M
19	COMPRESSOR	1	1.50M
AS SHOWN	WELLTEST TREE	1	2.0M
AS SHOWN	PORTABLE LIGHTING TOWER	2	9.00M

**DECOMMISSIONING AND BOREHOLE ABANDONMENT
(DRAWING NO. ZG-AER-AM-PA-28)**

AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	GENERATOR	1	2.00M
AS SHOWN	AER SECURITY OFFICE	2	2.60M
AS SHOWN	AER SECURITY ACCOMMODATION	1	2.60M
AS SHOWN	OFFICE & ACCOMMODATION	3	3.40M
AS SHOWN	OFFICE	3	2.60M
AS SHOWN	TOILETS & SHOWERS	1	3.40M
AS SHOWN	POTABLE WATER TANK	1	2.60M
AS SHOWN	LAUNDRY UNIT	1	4.10M
AS SHOWN	SURFACE WATER TREATMENT CONTAINER	1	2.90M
AS SHOWN	FIRE WATER TANK	1	3.40M
AS SHOWN	WORKOVER RIG (MAST)	1	32.50M
AS SHOWN	KOOMEY UNIT	1	2.00M
AS SHOWN	FLUID PUMPING UNIT	1	3.80M
AS SHOWN	250 BBL TANK	1	3.40M
AS SHOWN	GENERATOR	1	2.60M
AS SHOWN	TOOL STORE	1	2.60M
AS SHOWN	500 BBL FLUID STORAGE TANK	2	3.40M
AS SHOWN	TOOL STORE	2	3.40M
AS SHOWN	MUD TRAILER	1	4.00M
AS SHOWN	MUD LOGGERS	1	2.60M
AS SHOWN	WIRELINE TRUCK	1	4.30M
AS SHOWN	WIRELINE TRAILER	1	4.30M
AS SHOWN	PORTABLE LIGHTING TOWER	4	9.00M

RESTORATION AND AFTERCARE (EQUIPMENT LAYOUT AS PER CONSTRUCTION WORKS (DRAWING NO. ZG-AER-AM-PA-30 to ZG-AER-AM-PA-36))

AS SHOWN	GENERATOR (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	DIESEL TANK (ENTRANCE TO ACCESS TRACK)	1	1.50M
AS SHOWN	AER SECURITY OFFICE (ENTRANCE TO ACCESS TRACK)	1	2.60M
AS SHOWN	AER SECURITY OFFICE	1	2.60M
AS SHOWN	WELFARE UNIT	2	2.60M
AS SHOWN	LOCKABLE STORES	2	2.60M
AS SHOWN	DIESEL TANK	1	1.50M
VARIOUS	360 EXCAVATOR (MAX BOOM HEIGHT)	1	11.00M
VARIOUS	DUMPER TRUCK	2	2.80M
VARIOUS	LARGE ROLLER	1	2.80M
VARIOUS	D5 TRACKED DOZER	1	2.80M
VARIOUS	MINI DIGGER	1	6.00M
VARIOUS	ROLLER	2	2.60M
VARIOUS	TARMAC PAVING MACHINE	1	3.90M
VARIOUS	PILING RIG	1	22.90M
VARIOUS	LAND DRAINAGE TRENCHING MACHINE	1	2.60M
AS SHOWN	PORTABLE LIGHTING TOWER	2	9.00M

QUESTION 11: EMPLOYMENT

THE NUMBER OF 10-YEAR FULL TIME EQUIVALENT JOBS DIRECTLY ASSOCIATED WITH THE PROPOSED DEVELOPMENT HAS BEEN CALCULATED AND IS SHOWN IN THE TABLE BELOW. THE NUMBER OF FULL TIME EQUIVALENT JOBS OVER THE DURATION OF THE PLANNING PERMISSION IS ALSO GIVEN. THESE FIGURES DO NOT INCLUDE ANY OF THE APPLICANTS HEAD OFFICE STAFF OR ADVISORS, OR ANY INDIRECT OR INDUCED EMPLOYMENT RESULTING FROM THE PROPOSED DEVELOPMENT

DEVELOPMENT PHASE	OPERATIONAL STAFF	WORKING DAYS PER OPERATIONAL PHASE	WORKING HOURS/12 HOUR SHIFTS PER PHASE	TOTAL STAFF DAYS	220 -DAY YEARS (EQUIVALENT TO A FIVE DAY WORKING WEEK)
PHASE 1	14	80	1	1120	5
PHASE 2	29	152	2	8816	40
PHASE 3	29	152	2	8816	40
PHASE 4	24	60	1	1440	7
PHASE 5	22	60	2	2640	12
PHASE 6	10	90	2	1800	8
PHASE 7	16	28	1	448	2
PHASE 8	14	40	1	560	3
TOTAL				25640	117
NUMBER OF 10 YEAR FULL TIME EQUIVALENT JOBS					12
NUMBER OF FULL TIME EQUIVALENT JOBS FOR DURATION OF PLANNING PERMISSION					23

QUESTION 18 – TRADE EFFLUENT

PHASE 1 WELLSITE AND ACCESS TRACK CONSTRUCTION	AMOUNT OF WASTE PRODUCED (TONNE)
VEGETATION	0.5
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
WOOD	0.05
OIL FILTERS	0.005
SURFACE RUN-OFF WATER	280
METAL CUTTINGS	0.05
MIXED MUNICIPAL WASTE	4
FOUL EFFLUENT	4

PHASE 2 - DRILLING AND CORING OF VERTICAL BOREHOLE	AMOUNT OF WASTE PRODUCED (TONNE)
CLAYS AND SAND	49
OIL BASED DRILLING FLUID	735
OIL BASED ROCK CUTTINGS	318
WATER BASED DRILLING FLUID	1629
WATER BASED ROCK CUTTINGS	572
HYDRAULIC OILS	2
ENGINE OIL AND LUBRICANTS	2

WOOD	0.05
OIL FILTERS	0.005
SURFACE RUN-OFF WATER	1520
CONCRETE / CEMENT	0.5
METAL CUTTINGS	0.05
MIXED MUNICIPAL WASTE	11
FOUL EFFLUENT	11

PHASE 3 - DRILLING OF HORIZONTAL BOREHOLE	AMOUNT OF WASTE PRODUCED (TONNE)
CLAYS AND SAND	49
OIL BASED DRILLING FLUID	740
OIL BASED ROCK CUTTINGS	320
WATER BASED DRILLING FLUID	1,550
WATER BASED ROCK CUTTINGS	545
HYDRAULIC OILS	2
ENGINE OIL AND LUBRICANTS	2
WOOD	0.05
OIL FILTERS	0.005
SURFACE RUN-OFF WATER	1520
CONCRETE / CEMENT	0.5
METAL CUTTINGS	0.05
MIXED MUNICIPAL WASTE	11
FOUL EFFLUENT	11

PHASE 4 - HYDRAULIC FRACTURE STIMULATION OF VERTICAL AND HORIZONTAL BOREHOLES;	AMOUNT OF WASTE PRODUCED (TONNE)
HYDRAULIC FRACTURE FLUID (RETAINED FLUID)	21,465
FLOWBACK FLUID	1,800
PROPPANT	13.5
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
SURFACE RUN-OFF WATER	600
MIXED MUNICIPAL WASTE	4
FOUL EFFLUENT	4

PHASE 5 - INITIAL FLOW TESTING	AMOUNT OF WASTE PRODUCED (TONNE)
FLOWBACK FLUID	10,770
PROPPANT	142
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
WOOD	0.05
OIL FILTERS	0.005

NATURAL GAS	7,410
SURFACE RUN-OFF WATER	600
METAL CUTTINGS	0.05
MIXED MUNICIPAL WASTE	4
FOUL EFFLUENT	4
NITROGEN	-

PHASE 6 EXTENDED WELL TEST	AMOUNT OF WASTE PRODUCED (TONNE)
FLOWBACK FLUID	1,200
PROPPANT	9
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
WOOD	0.05
OIL FILTERS	0.005
NATURAL GAS	7,702
SURFACE RUN-OFF WATER	900
METAL CUTTINGS	0.05
MIXED MUNICIPAL WASTE	6
FOUL EFFLUENT	6

PHASE 7 DECOMMISSIONING AND BOREHOLE ABANDONMENT	AMOUNT OF WASTE PRODUCED (TONNE)
WELL SUSPENSION BRINE	50
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
WOOD	0.05
OIL FILTERS	0.005
SURFACE RUN-OFF WATER	280
CONCRETE / CEMENT	0.5
METAL CUTTINGS	0.05
METAL CUTTINGS (CONTAMINATED)	1.5
MIXED MUNICIPAL WASTE	2
FOUL EFFLUENT	2

PHASE 8 - WELLSITE RESTORATION	AMOUNT OF WASTE PRODUCED (TONNE)
HYDRAULIC OILS	1
ENGINE OIL AND LUBRICANTS	1
WOOD	0.05
OIL FILTERS	0.005
SURFACE RUN-OFF WATER	140
CONCRETE / CEMENT	1406

GEOGRID	6.42
HDPE MEMBRANE	23.75
PLASTIC PIPES	0.95
POLYSTORM CELL	15
GEOGRID (CONTAMINATED)	0.338
OIL-WATER SEPARATOR	0.75
PLASTIC PIPES (CONTAMINATED)	0.05
FENCING	7.5
STEEL (CONCRETE MESH)	64
METAL CUTTINGS	0.05
STONE AGGREGATES (CONTAMINATED)	673
STONE AGGREGATES	12,802
CONCRETE / CEMENT (CONTAMINATED)	74
GEOTEXTILE LINER (CONTAMINATED)	0.5
HDPE MEMBRANE (CONTAMINATED)	1.25
GEOTEXTILE LINER	9.5
MIXED MUNICIPAL WASTE	4
FOUL EFFLUENT	4