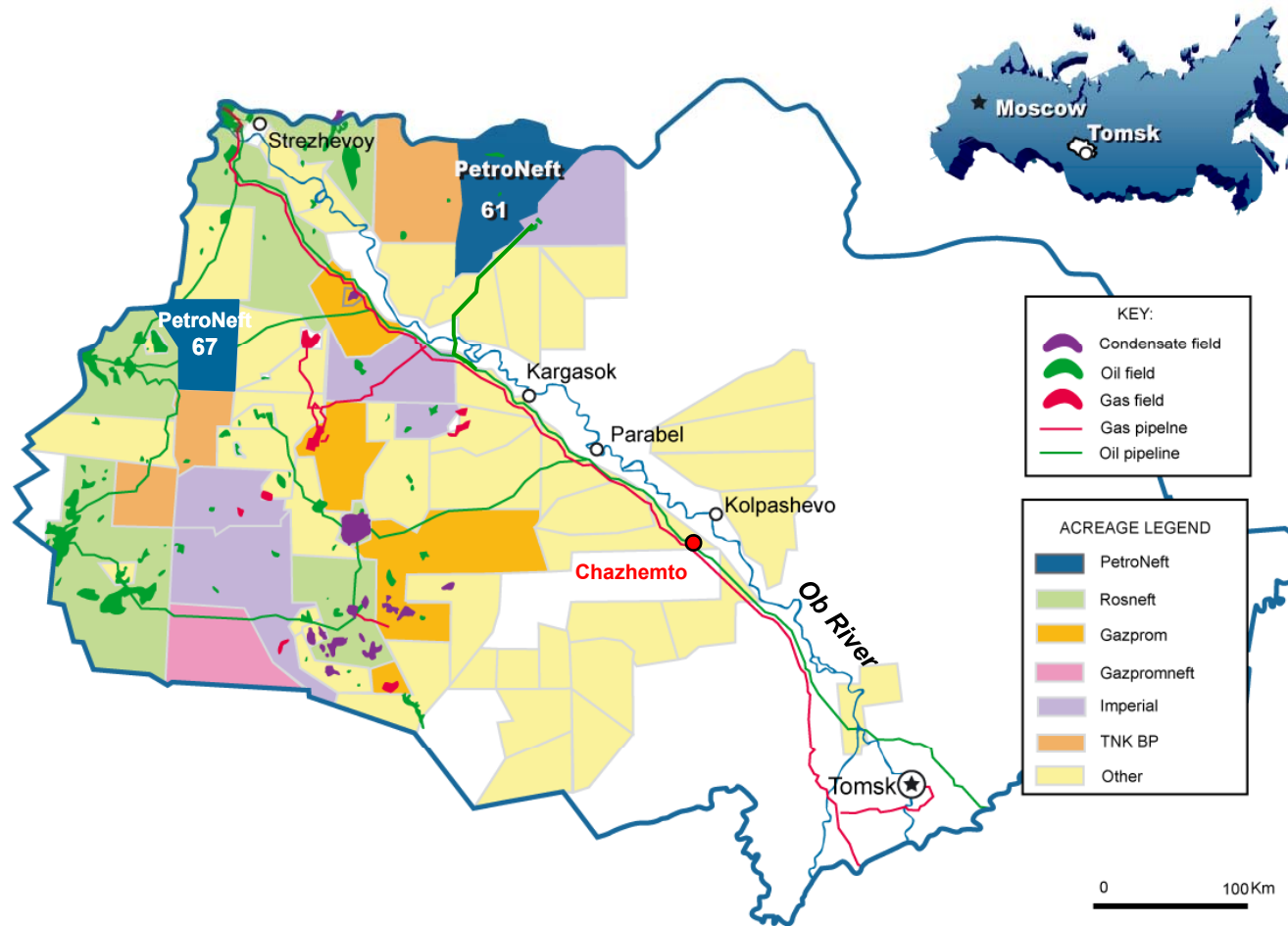


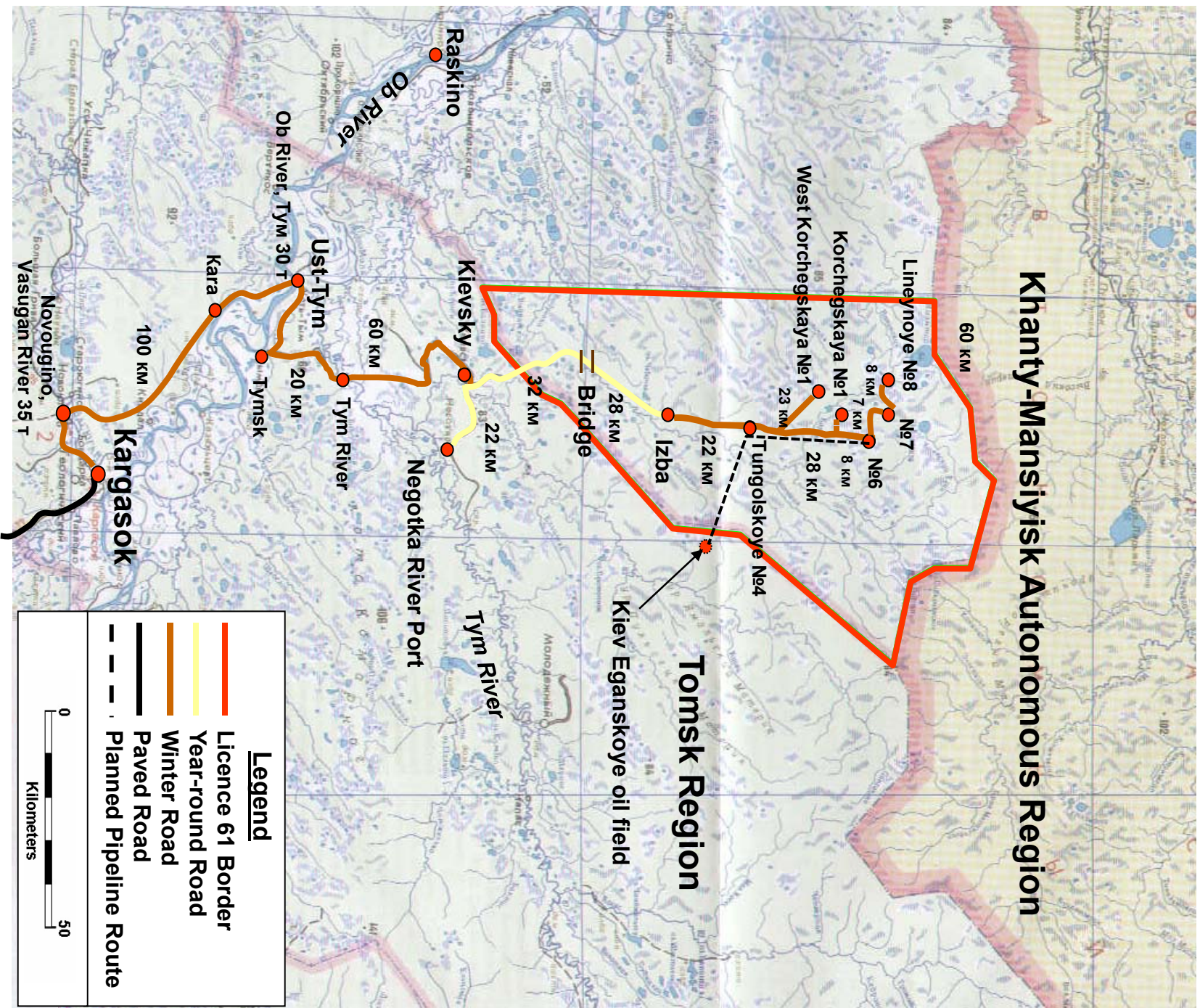
Source – USGS



Tomsk Oblast Very Active Region

Rosneft, Imperial Energy, TNK-BP, Gazprom, Gazpromneft, local companies

Khanty-Mansiysk Autonomous Region



To Tomsk
(Tomsk-Kargasok 450 km)

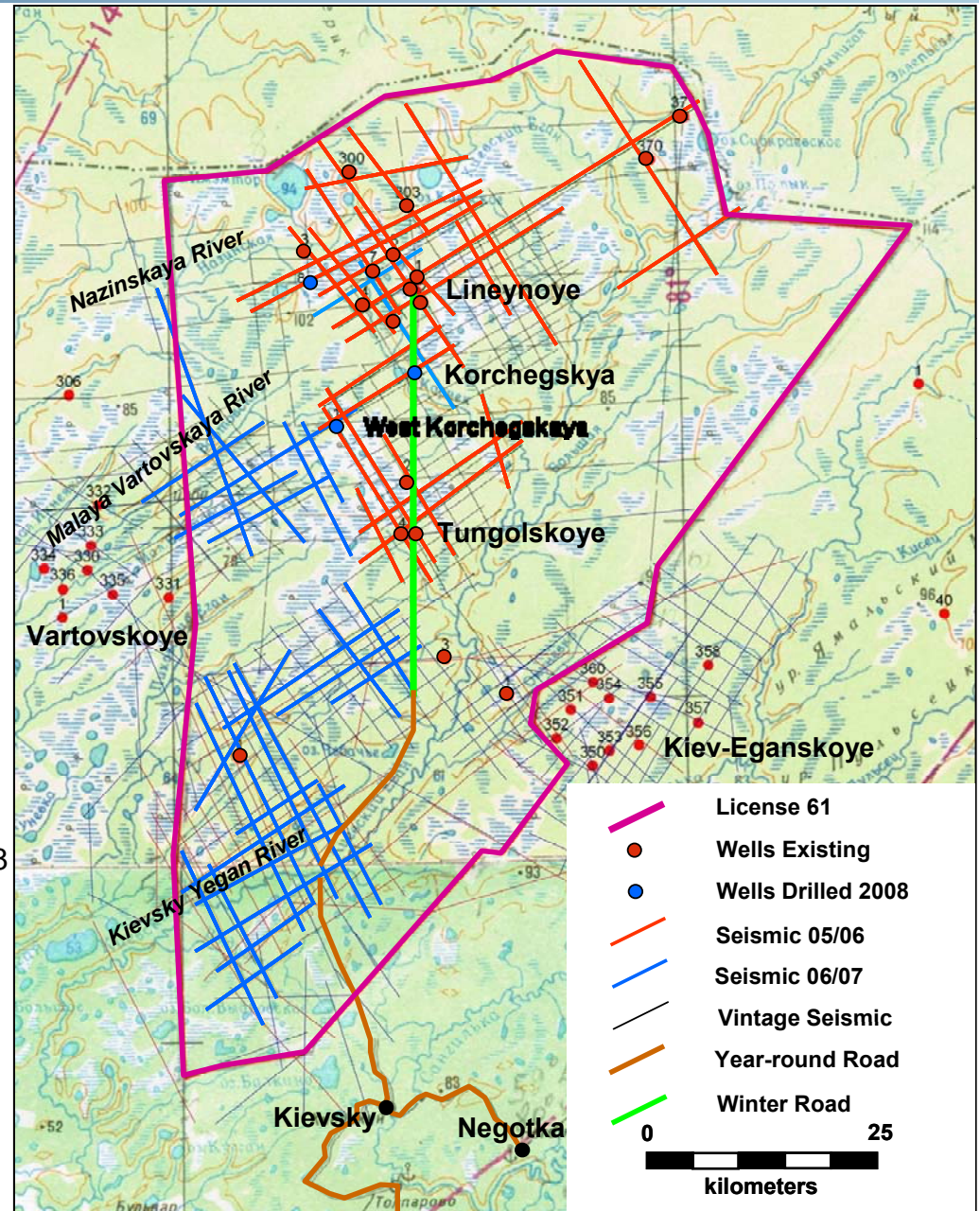
Licence 61 Major Activities

Acquired via 2004 State Auction:

- 4,991 square kilometers
- 14 prior wells drilled in the Soviet era
- 2,654 kms of vintage 2D seismic data
- 2 discovered fields at Lineynoye and Tungolskoye

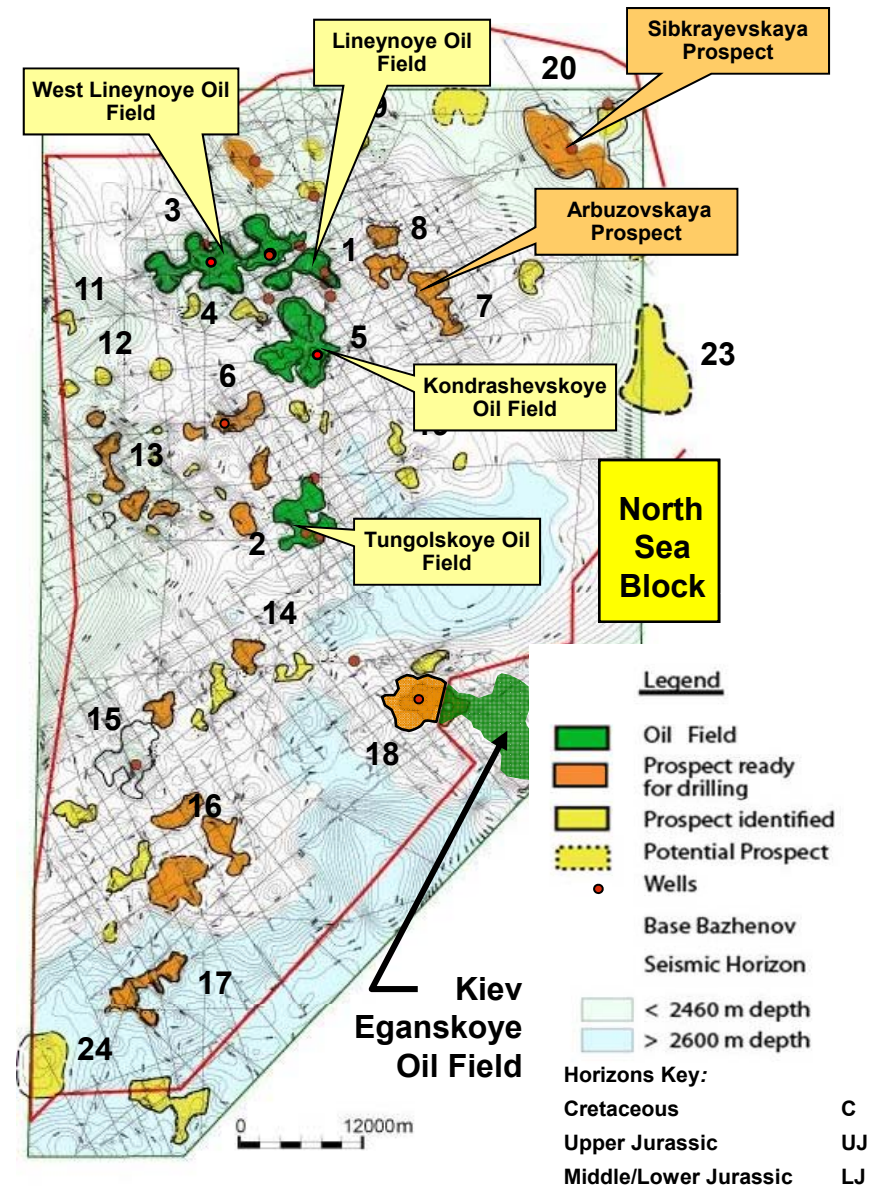
Since acquisition, PetroNeft has:

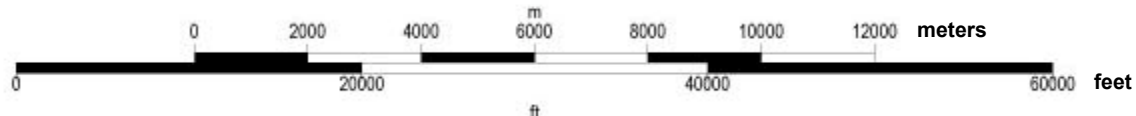
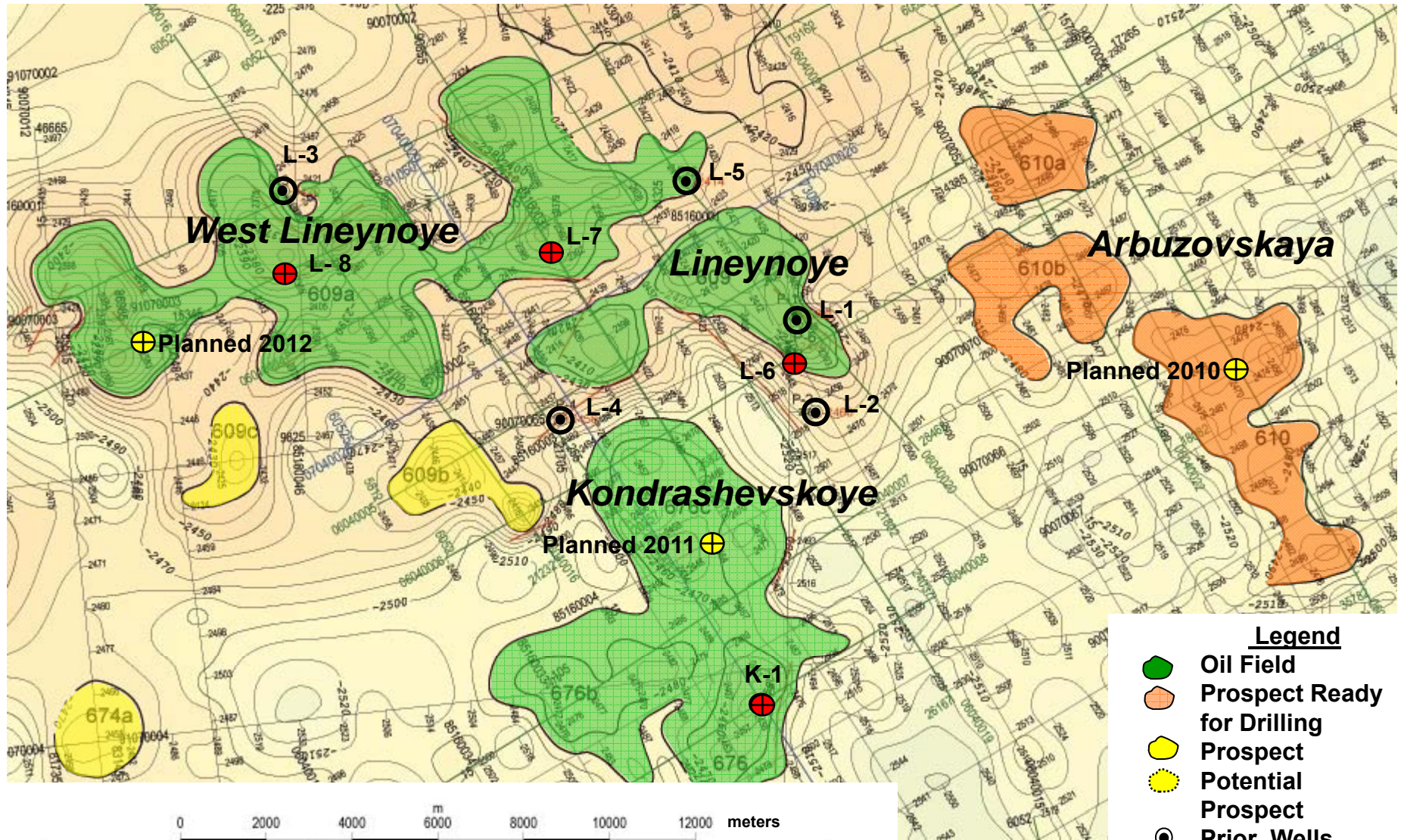
- Reprocessed 2,654 kms of vintage 2D seismic data
- Reprocessed 14 Soviet era wells
- Acquired 1,055 line kms of new 2D seismic data
- Drilled 3 Delineation and 3 Exploration wells
- New fields at West Lineynoye & Kondrashevskoye
- Over 25 identified Prospects
- RS Reserves – 70 million bbls 2P
- Russian GKZ Reserves – C1+C2 – 95 million bbls
- Board Sanctioned Lineynoye Phase 1 Project – June 2008
- Raised \$27.5 million for Phase 1 Project – Sept 2009
- Commenced production drilling operations – March 2010
- Signed \$30 million Macquarie Bank Facility – May 2010
- Completed pipeline construction – July 2010
- Commenced year round production – August 2010



Oil Fields / Prospects / Potential Prospects

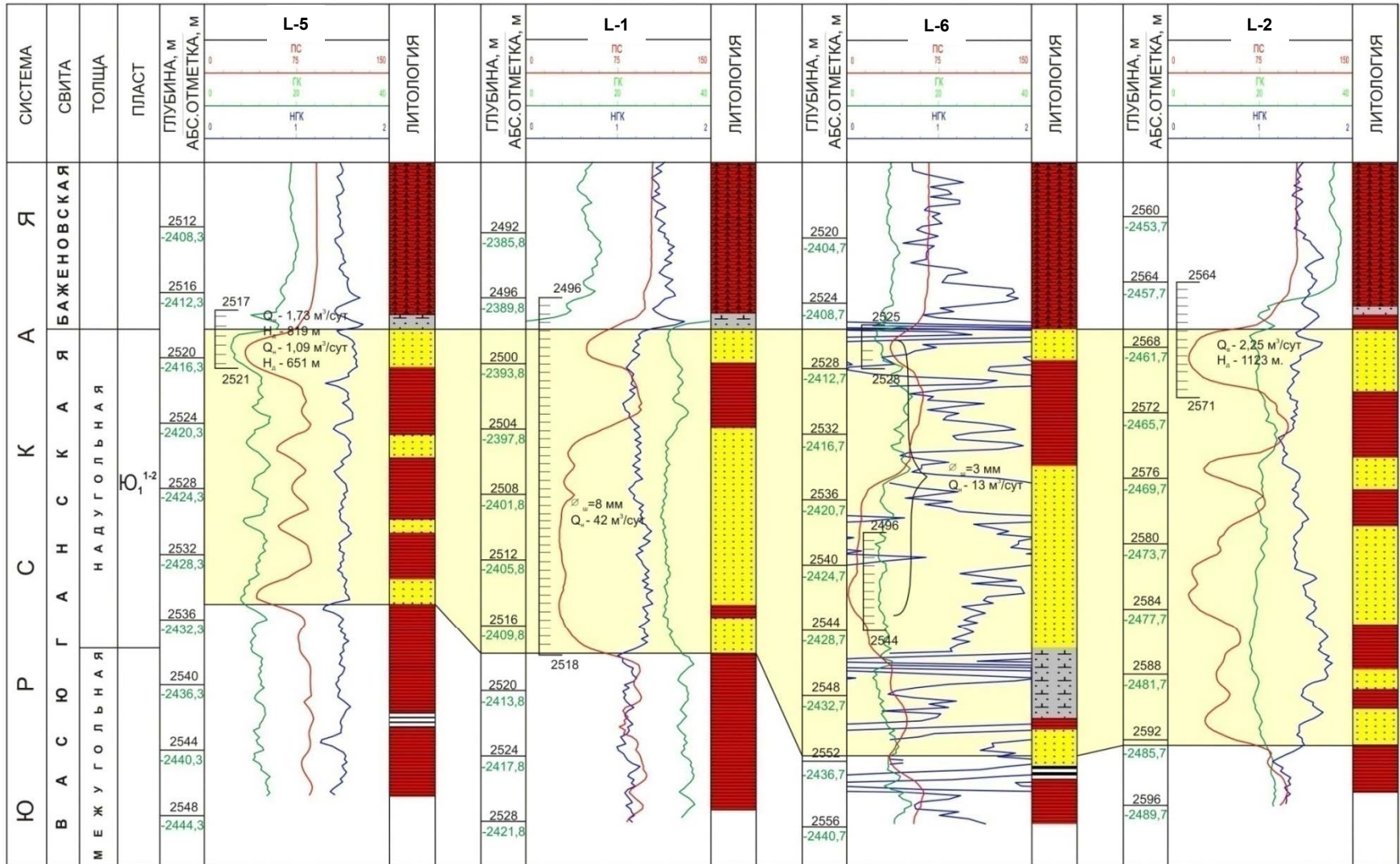
Map ref.	Field/Prospect	Horizon(s)
Oil fields		
1	Lineynoye Oil Field	UJ
2	Tungolskoye Oil Field	UJ
3	West Lineynoye Oil Field	UJ
5	Kondrashevskoye Oil Field	UJ
Prospects		
2	Tungolskoye West Lobe and North (2)	UJ
4	Lineynoye Lower	UJ
6	West Korchegskaya	LJ
7	Arbuzovskaya (Varyakhskaya)	UJ
8	Arbuzovskaya North & Upper (2)	UJ
9	Emtorskaya	UJ
10	Emtorskaya Crown	UJ
11	Sigayevskaya	UJ
12	Sigayevskaya East	UJ
13	Kulikovskaya Group (2)	UJ
14	Kusinskiy Group (2)	C, UJ, LJ
15	Tuganskaya Group (3)	C, UJ, LJ
16	Kirillovskaya (4)	C, UJ, LJ
17	North Balkinskaya	UJ, LJ
18	Traverskaya	C, UJ, LJ
19	Tungolskoye East	UJ
20	Sibkrayevskaya Crown & North	UJ
Potential Prospects (Leads)		
21	Emtorskaya North	UJ
22	Sibkrayevskaya East	UJ
23	Sobachya	UJ
24	West Balkinskaya	UJ

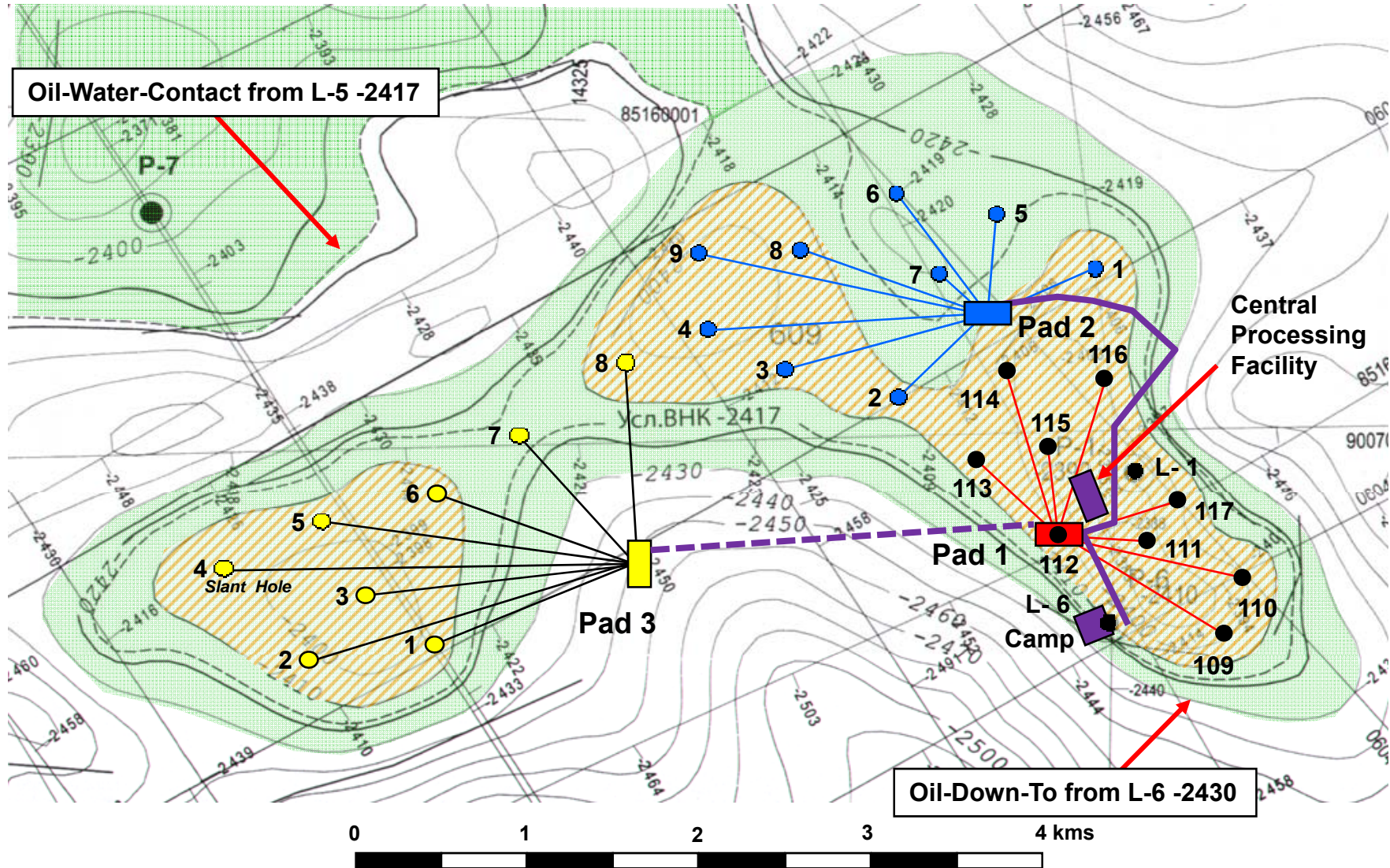




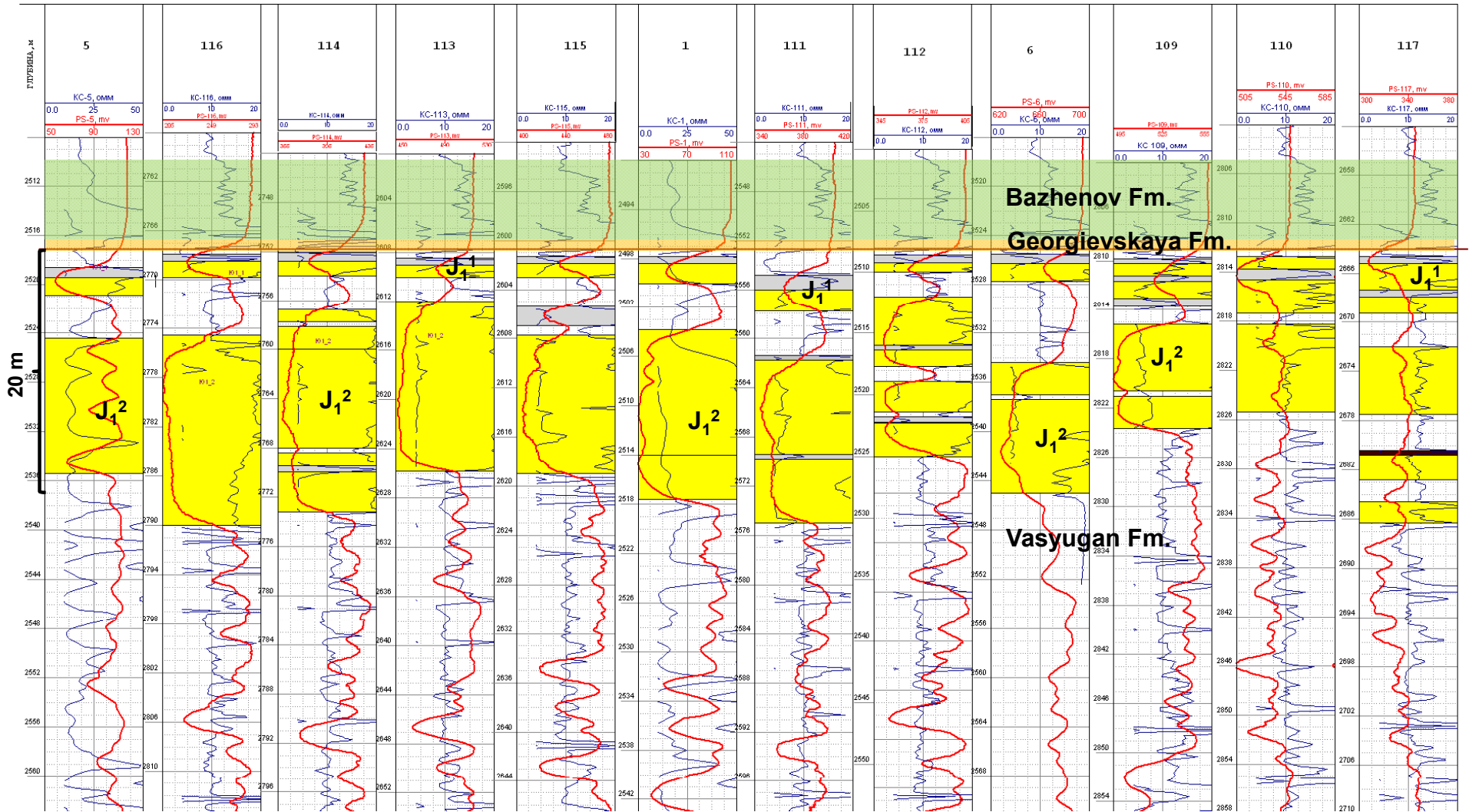
- Legend**
- Oil Field
 - Prospect Ready for Drilling
 - Prospect
 - Potential Prospect
 - ⊙ Prior Wells
 - ⊕ PetroNeft Wells
CI = 10 meters

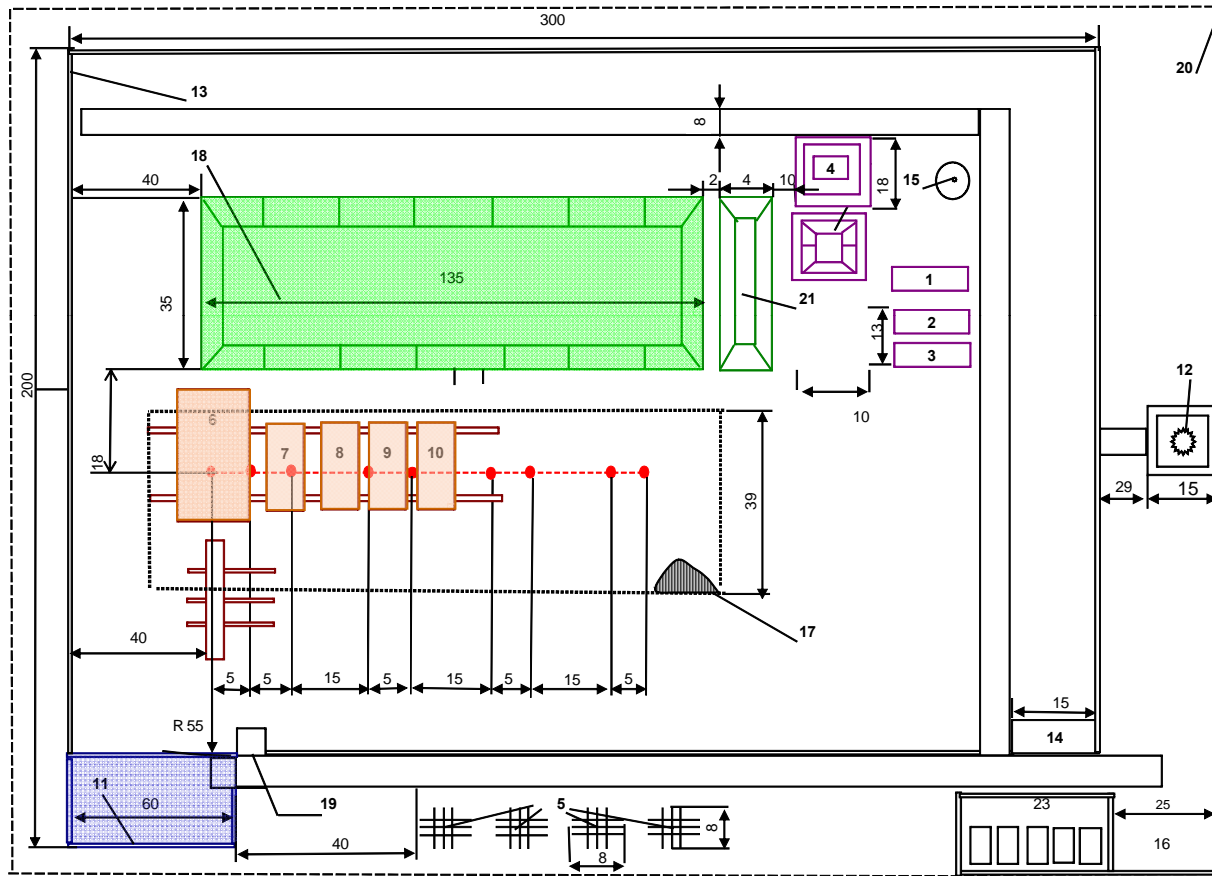
Structure Map on Base Bazhenov Horizon



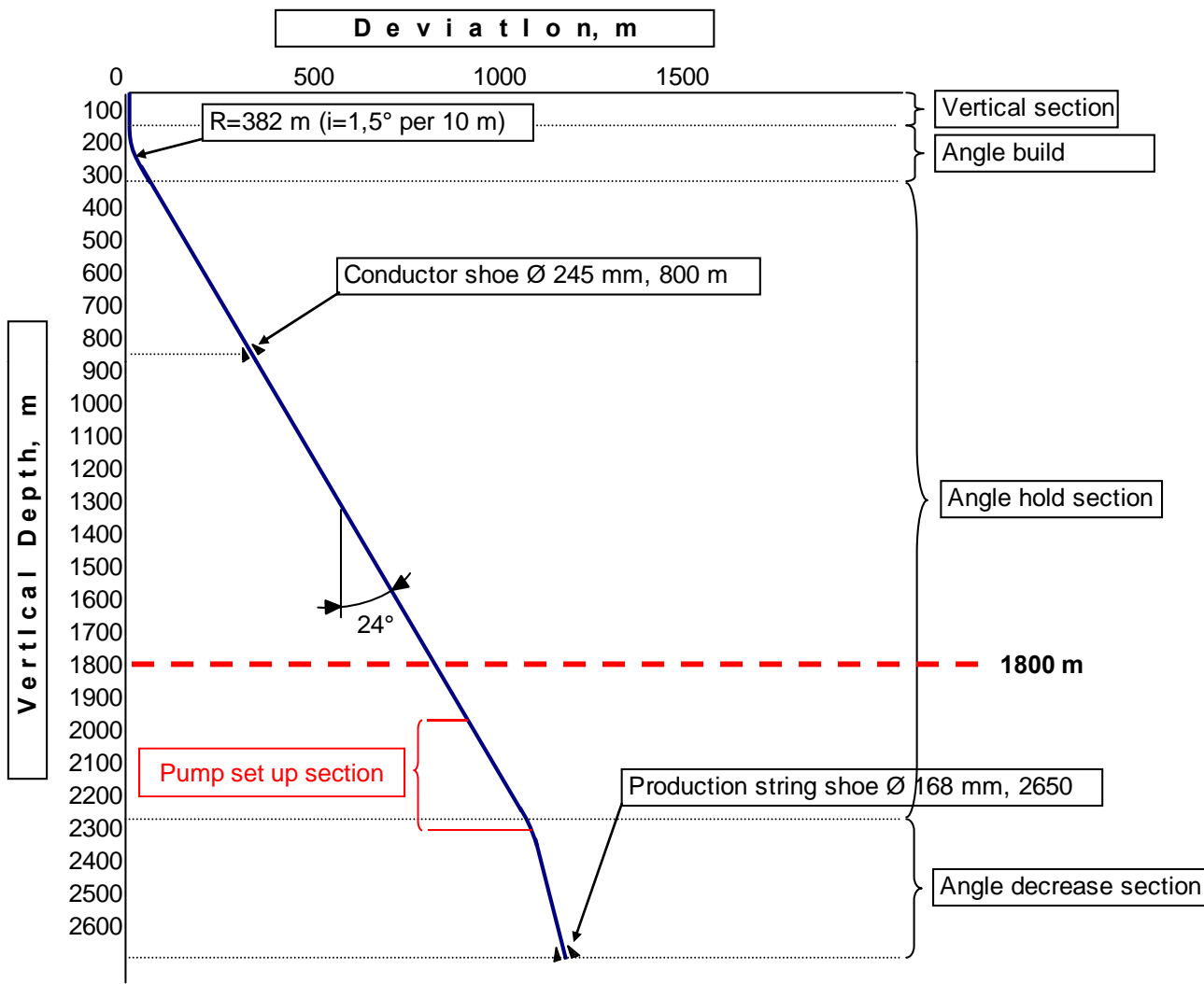


Structure Map at Top Reservoir showing area where Main Oil Sandstone is underlain by Shale

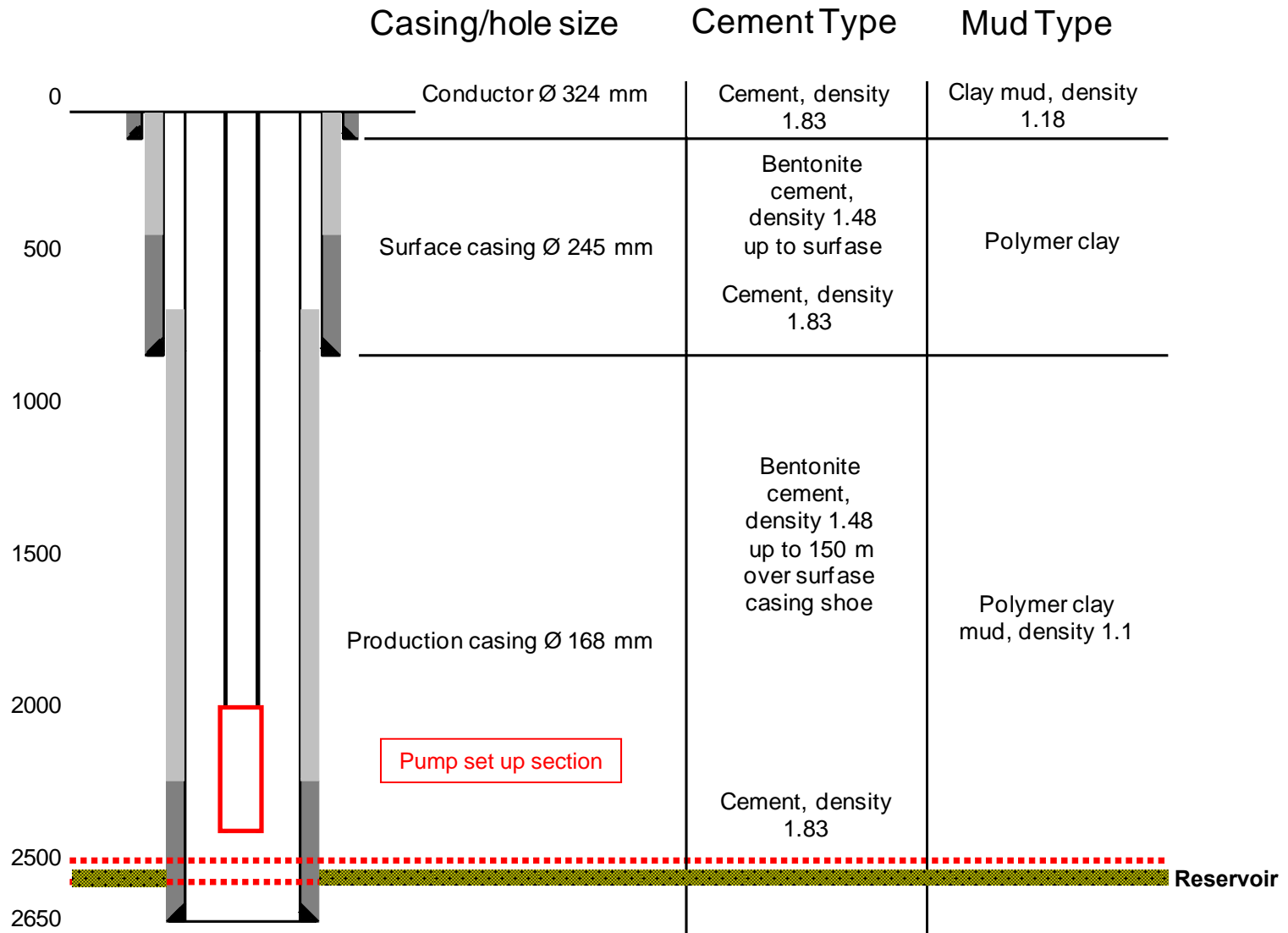




DATE SHEET		
	item	number
1	Ad. Water block	1
2	Water tank	1
3	Boiler	1
4	Oil tank site	1
5	Pipe stalls	10
6	Drawworks unit	1
7	Tank park	1
8	Pump block	1
9	Compressor block	1
10	Power generation train	1
11	Crew camp	1
12	Flare site	1
13	Pad bund	1
14	Cement site	1
15	Water well	1
16	Energy Complex	1
17	Plank foundation	1
18	Mud pit	1
19	Main entrance road	1
20	Fire dangerous area contour	1
21	Fire extinction basin	1
22	Boiler pit	1
23	Fuel Storage	

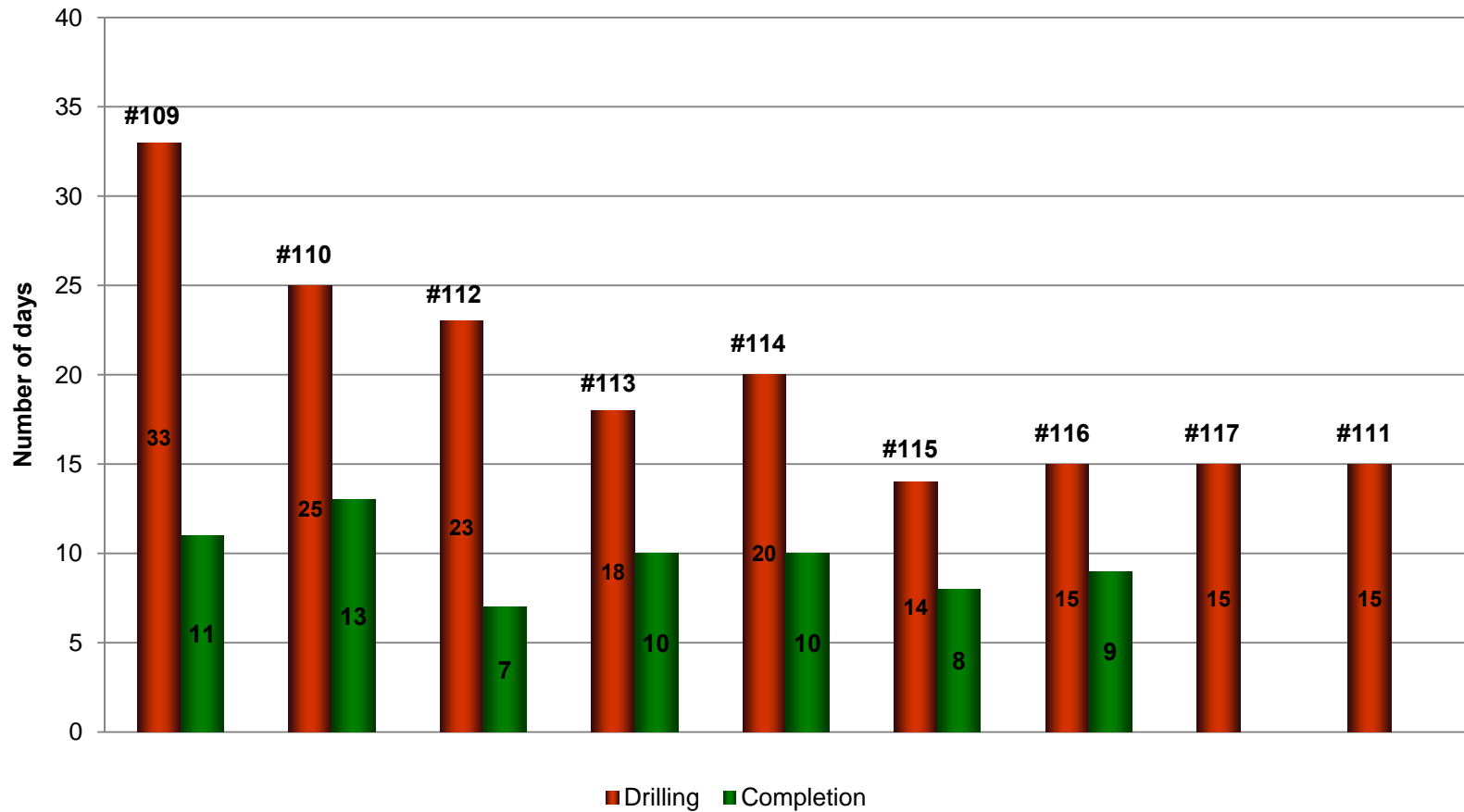


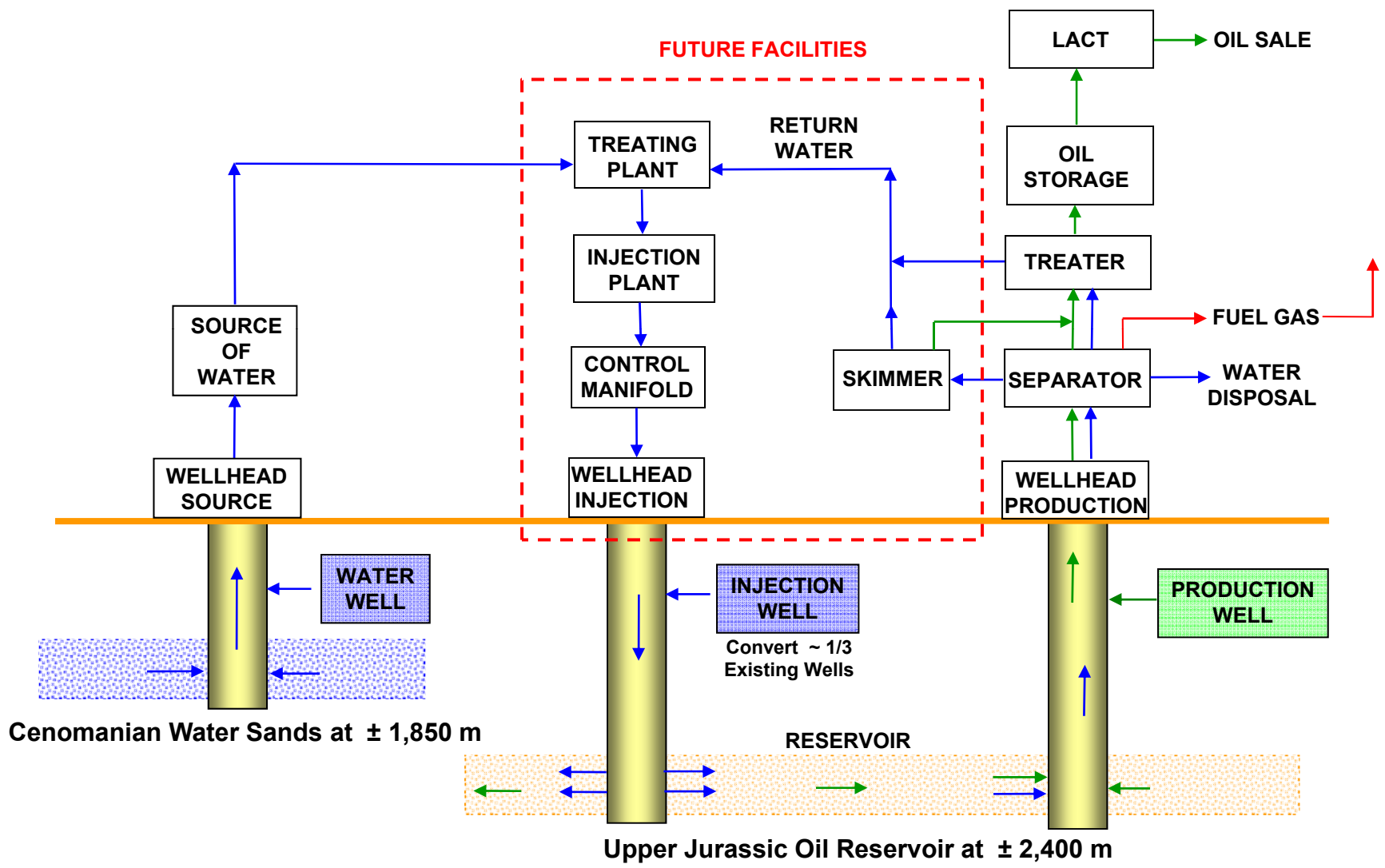
Source SNIIGMS

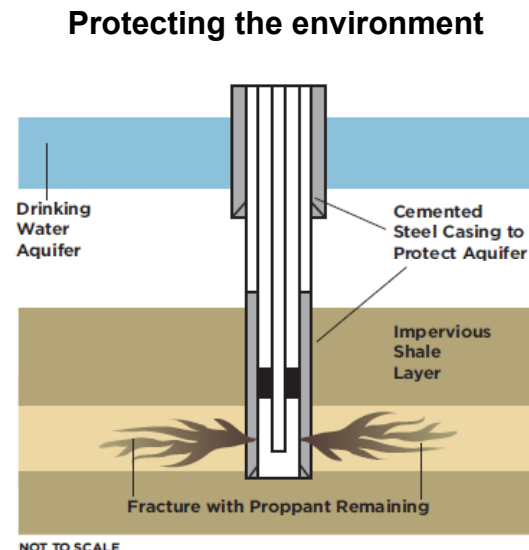
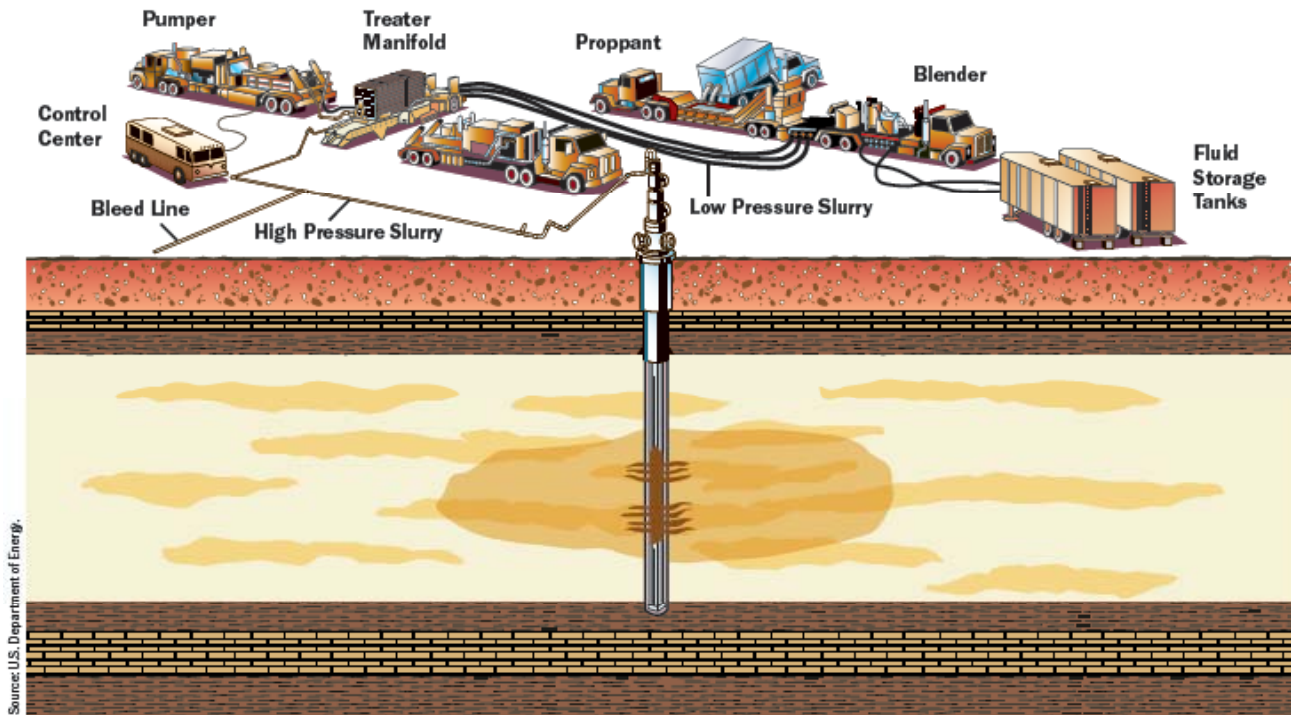




Construction Schedule for Lineynoye Development Wells







What is Hydraulic Fracturing?

- Pumping of viscous fluids and sand under high pressure into the formation to create a high permeable fracture into the reservoir.

Why Hydraulically Stimulate (Fracture) a well?

1. Remove Formation Damage caused by Drilling/Completion activities (near wellbore damage).
2. Extends a conductive channel into the reservoir:
 - a. Increases the natural productivity of the well with a high permeability channel,
 - b. Increases the drainage area of the well to contact isolated reservoir sands.

How is Ground Water & Drinking Water protected?

1. Proper Well Design – approved by local Government Authorities.
2. Casing and Cement protects and isolates both Water Zones and Productive Zones.
3. Impervious Shale layer above productive zone.
4. Thick interval between Ground Water and Productive Zones.



- Almost all Siberian oil wells fall into the intermediate permeability segment ($1 \text{ mD} > k < 50 \text{ mD}$). These wells produce well enough if completed and produced with customary practices. However, they can often be converted into excellent high volume producers by applying effective fracturing technology matched with a lift system to take advantage of the enhanced productivity.

Siberian Oil Well Data	Typical Well	Lineynoye Field	Units
Pr, average reservoir pressure	200	262	atmospheres
Pb, bubble point pressure	120	83	atmospheres
Ko, permeability to oil (liquid)	5	3 to 40+	millidarcies
h, formation thickness	15	2 to 15	meters
Vo, oil viscosity (liquid)	1.5	0.5	centipoise
Bo, formation volume factor	1.2	1.286	
Ct, total compressibility	2.94E-04	2.00E-05	atm -1
Re, drainage radius	250	500 to 700	meters
Rw, well bore radius	0.1	0.1	meters

- While a typical Siberian well: 5 mD, 15 metres, with a moderate skin damage produces ~ **20 m³/day (125 bopd)**,
- the same well stimulated effectively will produce up to **175 m³/day (1,100 bopd)**, depending on the flowing bottom hole pressure created by the lift system
- Each frac job should be designed individually using specific well parameters so that proper stimulation will occur. Effective fracture geometry is very sensitive to permeability changes in intermediate permeability reservoirs

Joe Mach, et. al



INPUT

10	Horizontal permeability, khorz (md)
0.73	Oil (or gas) viscosity at reservoir conditions, uo (cp)
1.162	Oil (or gas) formation volume factor, Bo or Bg (Rvol/STvol)
0	Skin factor
3777	reservoir pressure, pe (psia)
199	reservoir temperature (deg F)

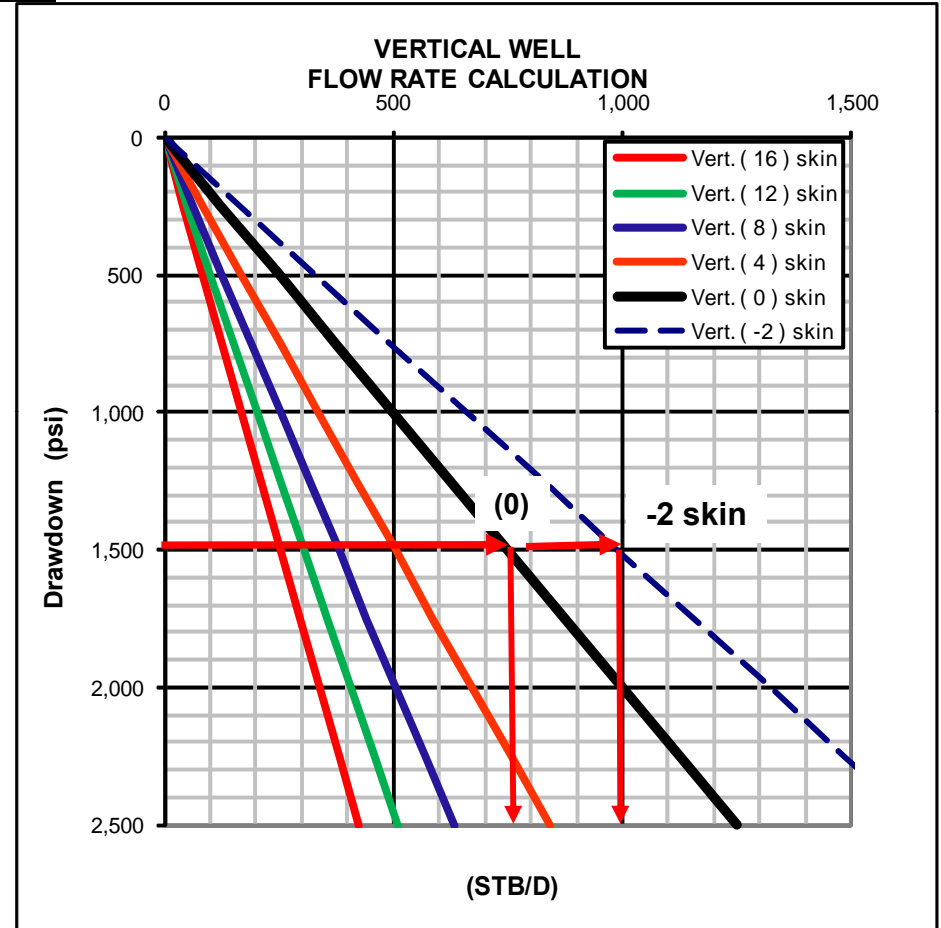
Geometry

121	spacing (acres)
0.35	wellbore radius, rw (ft)
49.2	Height, h (ft)
1,295.3	reservoir radius, r eh (ft)

16	12	8	4	0	-2
Vert. (16) skin	Vert. (12) skin	Vert. (8) skin	Vert. (4) skin	Vert. (0) skin	Vert. (-2) skin

Drawdown (psi)	Pwf (psi)	Vert. (16) skin (STB/D)	Vert. (12) skin (STB/D)	Vert. (8) skin (STB/D)	Vert. (4) skin (STB/D)	Vert. (0) skin (STB/D)	Vert. (-2) skin (STB/D)
0	3,777	0	0	0	0	0	0
250	3,527	42	51	63	84	125	165
500	3,277	85	102	127	168	250	330
750	3,027	127	152	190	252	375	495
1,000	2,777	170	203	253	336	500	661
1,250	2,527	212	254	317	420	625	826
1,500	2,277	254	305	380	504	750	991
1,750	2,027	297	355	443	588	875	1,156
2,000	1,777	339	406	506	672	1,000	1,321
2,250	1,527	382	457	570	756	1,124	1,486
2,500	1,277	424	508	633	840	1,249	1,651

OUTPUT



1. Lineynoye Well inflow performance for a 10 mD, 15 metre thick reservoir
2. Vertical Well assumes zero and -2 skin
3. Experience shows that in prediction mode a fixed BHP of 1500 psi is a reasonable approximation for continued ESP use

FRACTURE PROPAGATION SOLUTION

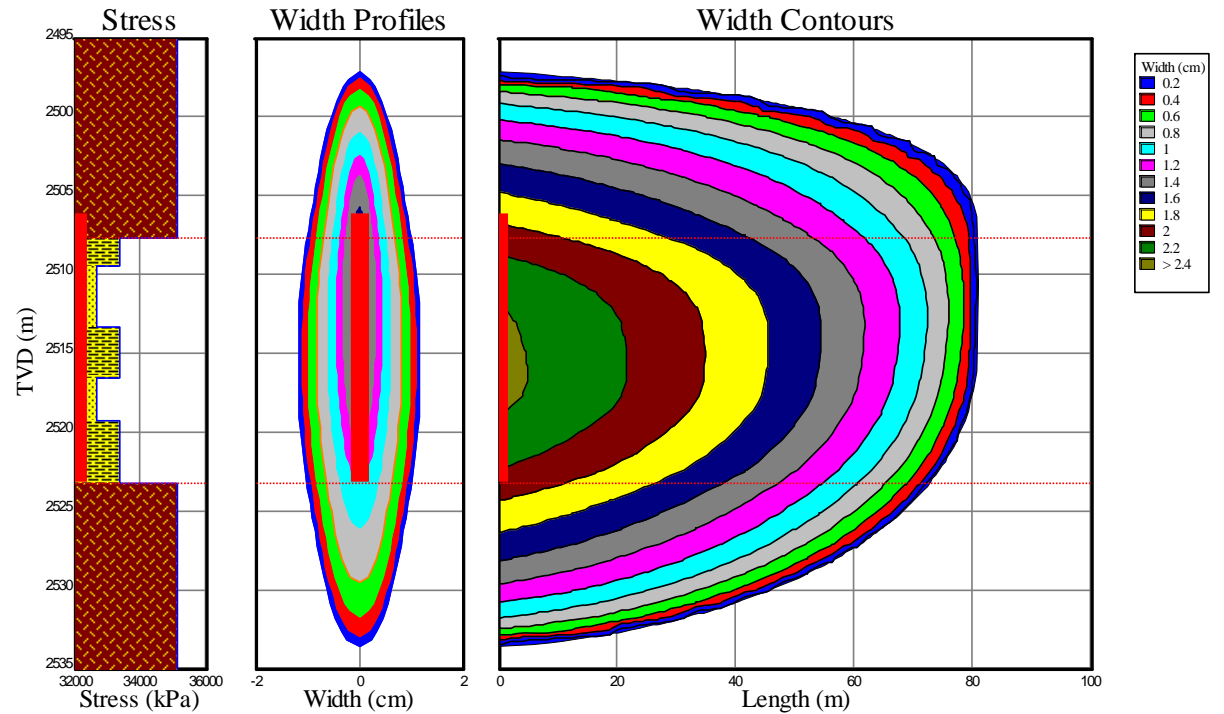
Calculated Values

Slurry Volume Injected	185.24 m ³
Liquid Volume Injected	167.83(m ³)
Fluid Loss Volume	106.81(m ³)
Frac Fluid Efficiency	0.42026
Net Frac Pressure	6516.1(kPa)
Length (one wing)	81.103(m)
Upper Frac Height	13.451(m)
Lower Frac Height	22.969(m)
Upper Frac Height (TVD)	2497.2(m)
Lower Frac Height (TVD)	2533.6(m)
Total Frac Height	36.42(m)
Max. Frac Width at Perfs	2.2444(cm)
Avg. Hydraulic Frac Width	1.3223(cm)

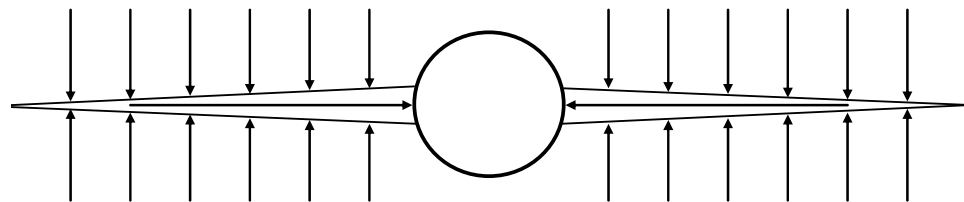
PROPPANT DESIGN SUMMARY

Frac Length – Created	81.103 m
Frac Length – Propped	80.7 m
Frac Height - Avg.	29.955 m
Propped Height (Pay Zone) - Avg.	15.408 m
Max Width at Perfs – EOJ	2.2444 cm
Propped Width (Well) - Avg.	0.85899 cm
Propped Width (Pay Zone) - Avg.	0.69615 cm
Conc./Area (Frac) - Avg. at EOJ	10.949 kg/m ²
Conc./Area (Pay Zone) - Avg. at Closure	13.249 kg/m ²
Frac Conductivity (Pay Zone) - Avg. at Closure	2077.6 md-m
Dimensionless Frac Conductivity (Pay Zone)	3.218
Total Sand Mass Pump	55.00 tons

EXAMPLE FRACTURE PROFILE



FLOW PROFILE



Example design – each well will have individual design



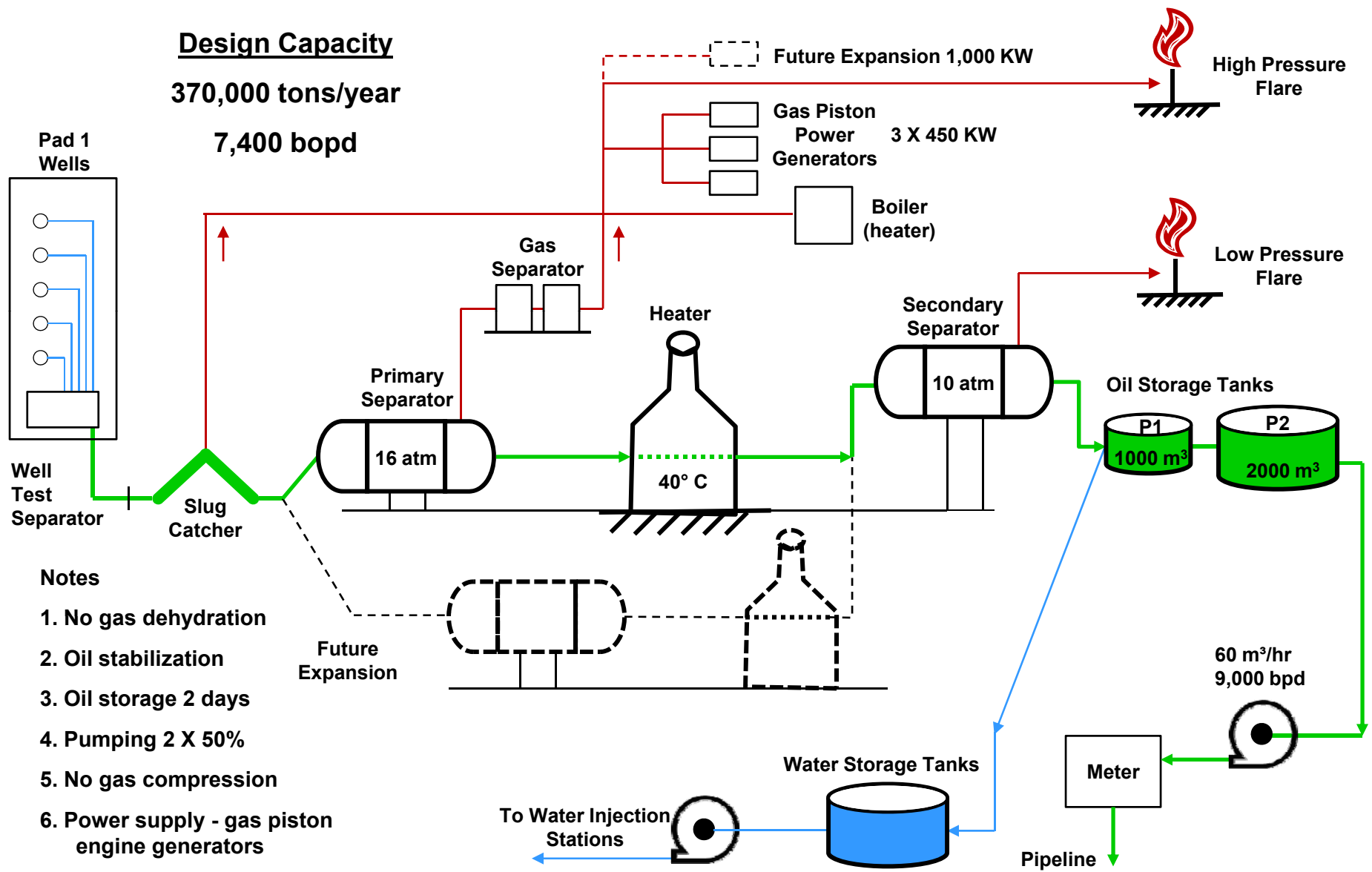
PetroNeft

Facilities Construction June 20, 2010



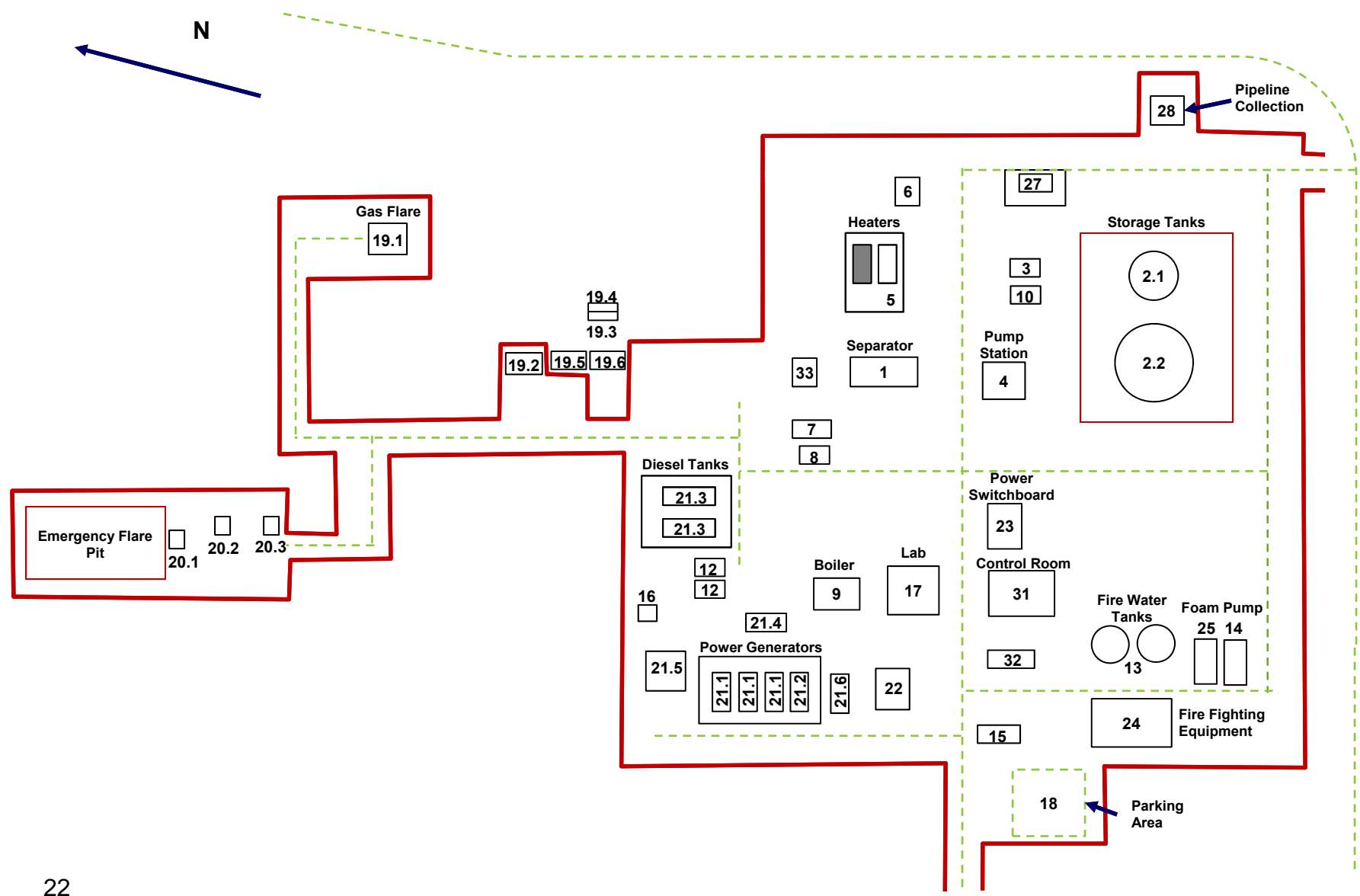


Design Capacity
370,000 tons/year
7,400 bopd

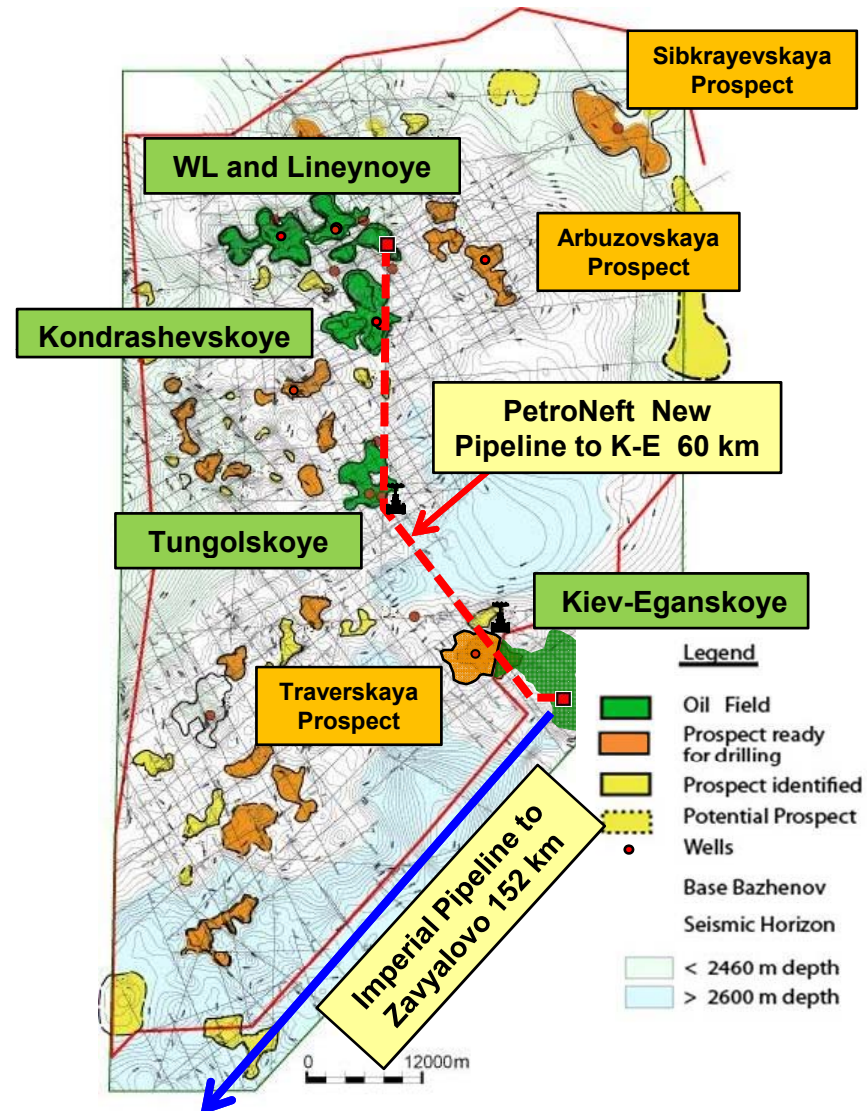


Notes

- 1. No gas dehydration
- 2. Oil stabilization
- 3. Oil storage 2 days
- 4. Pumping 2 X 50%
- 5. No gas compression
- 6. Power supply - gas piston engine generators



- **Sanctioned in June 2008**
- **First Phase**
 - Development of Lineynoye and West Lineynoye
 - Construction of 60 km production pipeline to Imperial Kiev-Eganskoye pipeline in Q1 2010
 - 25 year transportation agreement with Imperial includes use of storage, measuring and testing facilities
 - First pipeline oil production in August 2010
 - Production - 4,000 bopd end of 2010, 12,000 bopd in 2012
- **Additional Phases**
 - Incremental addition of Kondrashevskoye, Tungolskoye and other discoveries

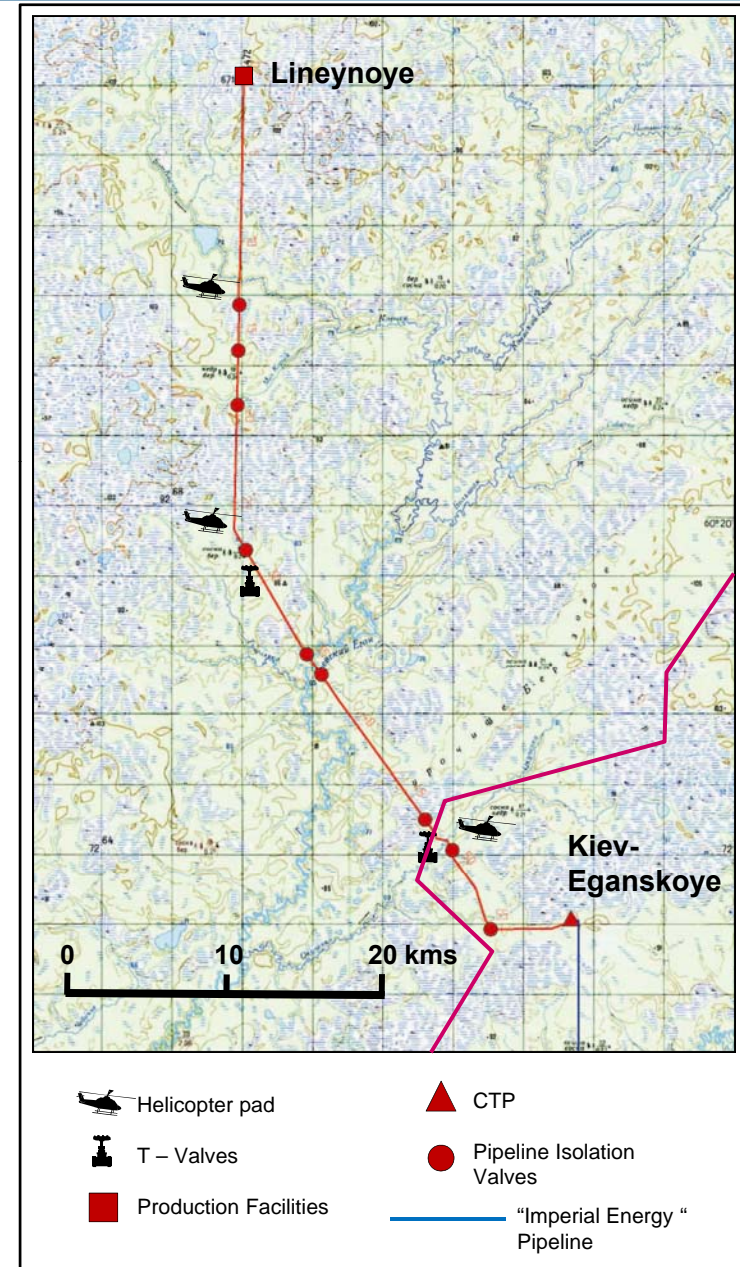


➤ Pipeline Infrastructure

- Length 60 km, Diameter 273 mm
- Capacity ~20,000 bopd
- Burial depth ~1 metre (5 m below rivers)
- 9 pipeline isolation valves
- 3 helicopter pads
- 2 pipeline T's for future connections

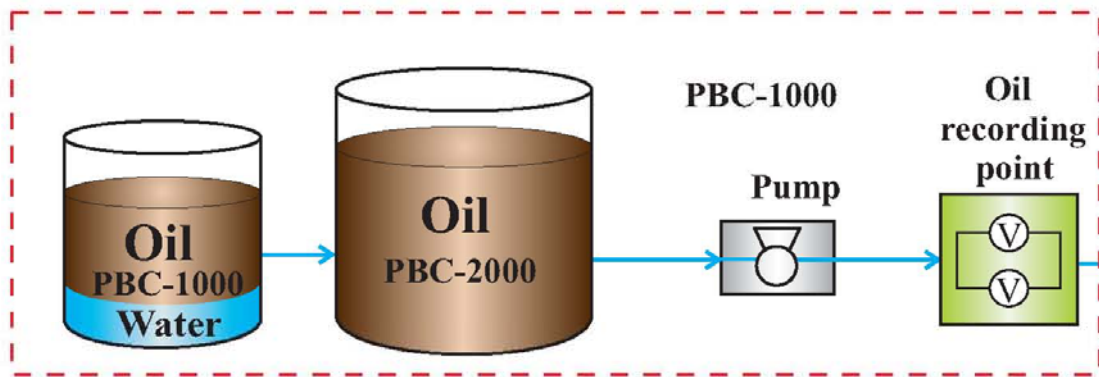
➤ Pipeline Monitoring Procedure

- The Company has an Emergency Response Plan in place and approved by the Russian authorities in event of an emergency.
- There is a pipeline inspection monitoring programme in place that includes ongoing monitoring of and control of oil flow and pressure changes in the pipeline. There is also a weekly visible inspection programme of the entire pipeline route.
- In the event of an shut-down there are 9 isolation valves located along the pipeline to mitigate any emergency.





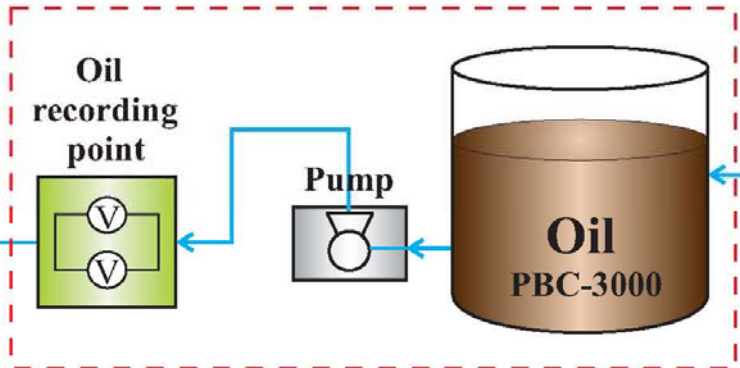
The Lineynoye Oil Field



Oil Pipe Line
Lineynoye - Kiev Eganskoye

60 km

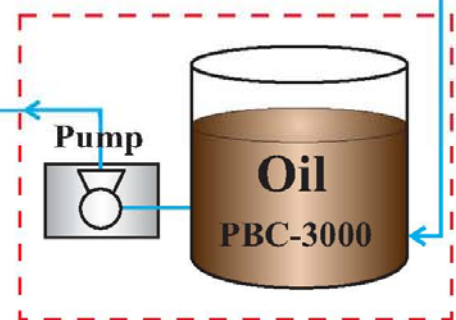
Zavyalovo settlement



Oil Pipe Line
Kiev Eganskoye -
Zavyalovo settlement

152 km

The Kiev Eganskoye oil field



Oil Pipe Line of "Transneft" corporation





Stimul – T, Tomsk

