

# PetroNeft Resources plc

Exploration, Development & Production in Russia



## Company Presentation

May 9, 2014





# Forward-Looking Statements



**This presentation contains certain forward-looking statements that are subject to the usual risk factors and uncertainties associated with the oil & gas exploration and production business.**

**Whilst PetroNeft believes the expectations reflected herein to be reasonable in light of the information available to them at this time, the actual outcome may be materially different owing to factors beyond the Company's control or within the Company's control where, for example, the Company decides on a change of plan or strategy.**

**PetroNeft undertakes no obligation to revise any such forward-looking statements to reflect any changes in the Company's expectations or any change in circumstances, events or the Company's plans and strategy. Accordingly no reliance may be placed on the figures contained in such forward looking statements.**

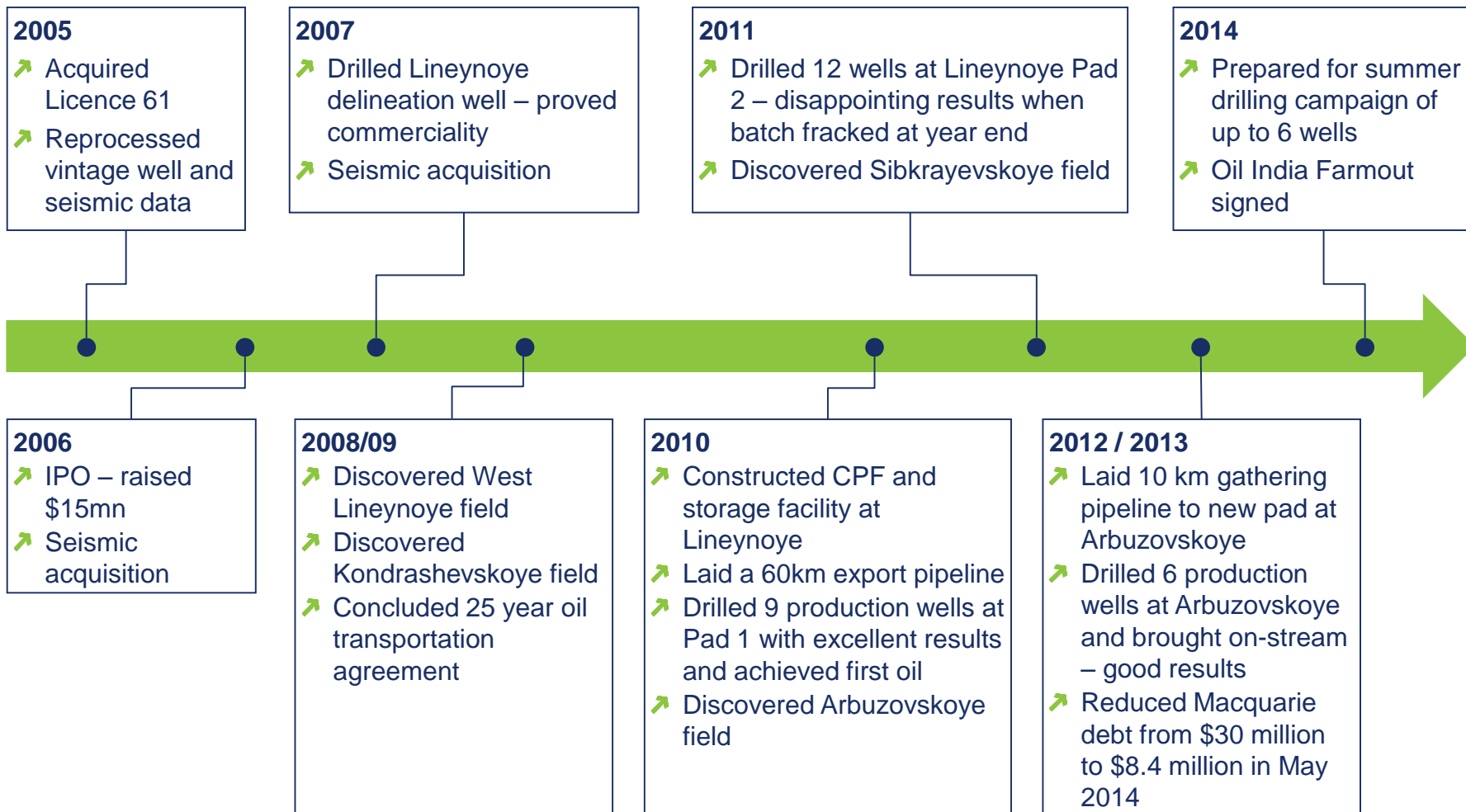


## Licence 61 – Farmout of 50% to Oil India Limited





## Continued successful progress...







## Key Management Personnel



**Dennis Francis**  
*CEO*

- Spent 30 years at Marathon, from 1990 became USSR/FSU task force manager to develop opportunities in Russia
- Ultimately, won the first Russian competitive tender to develop the Sakhalin II Project the first PSA-type licence (recipient of the Governor of Sakhalin Award for efforts relating to this project)
- BS Geophysical Engineering & MS Geology Colorado School of Mines, PMD Harvard Univ.



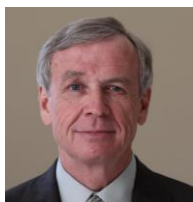
**Paul Dowling**  
*CFO*

- 20 years experience and Chartered Certified Accountant
- Previously partner at LHM Casey McGrath (Auditors & Accountants) in Dublin
- He is a fellow of the Association of Chartered Certified Accountants (ACCA) and a member of the Irish Taxation Institute. He currently represents the ACCA with the Consultative Committee of Accountancy Bodies



**Karl Johnson**  
*VP of BD and Operations*

- Spent 27 years at Marathon where his initial role included preparation feasibility study for developments in Western Siberia
- Lead the economic analysis of the Sakhalin II Project and was part of the team that negotiated the first Russian PSA. Lead of Marathon's Moscow Office after Marathon left Sakhalin II
- BS Petroleum Engineering from Marietta College, Executive MBA from Rice University

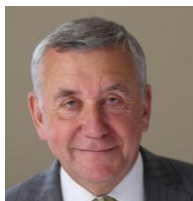


**Dr. David Sanders**  
*Executive Director, Secretary and General Counsel*

- 15 years experience doing business in Russia
- Previous work has included the Sakhalin II Project, Priobskoye, KMOC
- Dr Sanders has a degree in electronics from Pennsylvania Institute of Technology, a liberal arts degree from the University of Houston and a Doctorate of Jurisprudence from South Texas College of Law

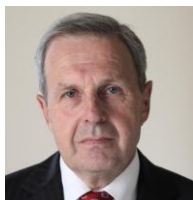


## Key Management Personnel



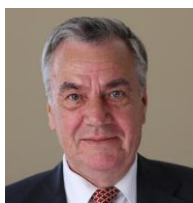
**Alexey Balyasnikov**  
General Director  
(Moscow)

- 35 years' experience in Russian oil and gas business
- Former Head of Representation for Marathon Oil in Moscow
- Geophysics degree from St. Petersburg University



**Alexander Frenovsky**  
Executive  
Director (Tomsk)

- 34 years in the oil industry including previous role as General Director and Chief engineer of Tomskneftegazgeologia
- Received various state awards for contributions to the understanding and development of hydrocarbons in the Tomsk region
- Graduated from the Oil University in Ufa, with a specialisation in "drilling of oil and gas wells"



**Dr. Nikolay Karapuzov**  
Chief  
Geophysicist /  
Geologist of  
Stimul-T

- Spent 35 years at Tomskneftegazgeologia ultimately becoming Chief geophysicist / geologist
- Participated in the discovery of 17 oil fields in the Tomsk area and awarded the title Honourable Geologist of Russia for his contributions
- Dr Karapuzov graduated from Voronezh State University with specialisation in "geophysical methods of prospecting and exploration of hydrocarbons"



## ***The Licence 61 Farmout***

- Total investment by OIL of up to US \$85 million
- US \$35 million upfront cash payment
  - Clears Macquarie debt of US \$8.4 million
  - Clears Arawak debt of US \$16.5 million
- US \$45 million of exploration and development expenditure on Licence 61.
  - Allows development of new fields at Licence 61
  - Until the US \$45 million is fully invested PetroNeft will not be obliged to invest any additional funds for Licence 61 exploration and development
- US \$5 million performance bonus, contingent upon gross production from the Sibkrayevskoye Field reaching 7,500 bopd within the next 5 years
- Positions PetroNeft to fully exploit the potential of all of its assets and opportunities and create value for all Shareholders



## ***The Licence 61 Farmout***

- PetroNeft will remain as Operator of Licence 61,
  - OIL will have the right to second two technical experts into PetroNeft's Tomsk team to assist with the development
  - OIL also has the right to become the Operator of the Licence should there be a substantial change in the management team of PetroNeft within the first three years which OIL believes not to be in its interests

## ***The Licence 61 Farmout is subject to:***

- Shareholder approval of the Farmout – 10:30 am EGM 9 May 2014
- Shareholder rejection of Natlata Resolutions – 11:15 am EGM 9 May 2014
- Regulatory approvals expected around end-May/early June



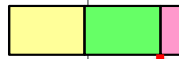
- Once the Licence 61 Farmout is completed, PetroNeft will:
  - drill a delineation well at Tungolskoye, the Company's first horizontal well
  - drill up to five additional production wells at Arbuzovskoye
  - drill a delineation well at Sibkrayevskoye, where significant upside potential and near-term developments are possible.
  - acquire seismic data across Sibkrayevskoye, Emtorskaya and West Lineynoye and other leads and prospects in northern part of Licence 61
- The Tungolskoye No. 5 well will be the first horizontal well drilled on Licence 61. Oil services company, Halliburton, will provide technical assistance with the horizontal segment. It is anticipated that the Tungolskoye oil field will be brought into production in 2015.
- All necessary supplies and equipment for this year's work programme have already been purchased and moved to the field by winter roads to allow for operations to commence upon completion of the farmout, thus ensuring that PetroNeft did not lose a year in its work schedule.
- It is expected that drilling will recommence in July 2014.



## Tungolskoye No. 5

Apr-14 Jul-14 Oct-14 Jan-15 Apr-15 Jul-15 Oct-15 Jan-16 Apr-16 Jul-16 Sep-16 Dec-16

Drilling + Testing T-5 well



Vertical well followed by 300m horizontal segment



## Arbuzovskoye Pad 1

5 wells at Arbuzovskoye



Up to 5 wells depending upon results

## Tungolskoye Pad 1

Pilot Project Approvals



Tungolskoye Pipeline



26 kms to Lineynoye Central Processing Facility

Drilling 5 Hz + 6 Vert wells



## Sibkrayevskoye

Sibkrayevskoye Seismic



Includes Emtorskaya and West Lineynoye

Drilling + Testing S-373 well



Timing and Location to be agreed with OIL

Pilot Project Approvals



Sibkrayevskoye Pipeline

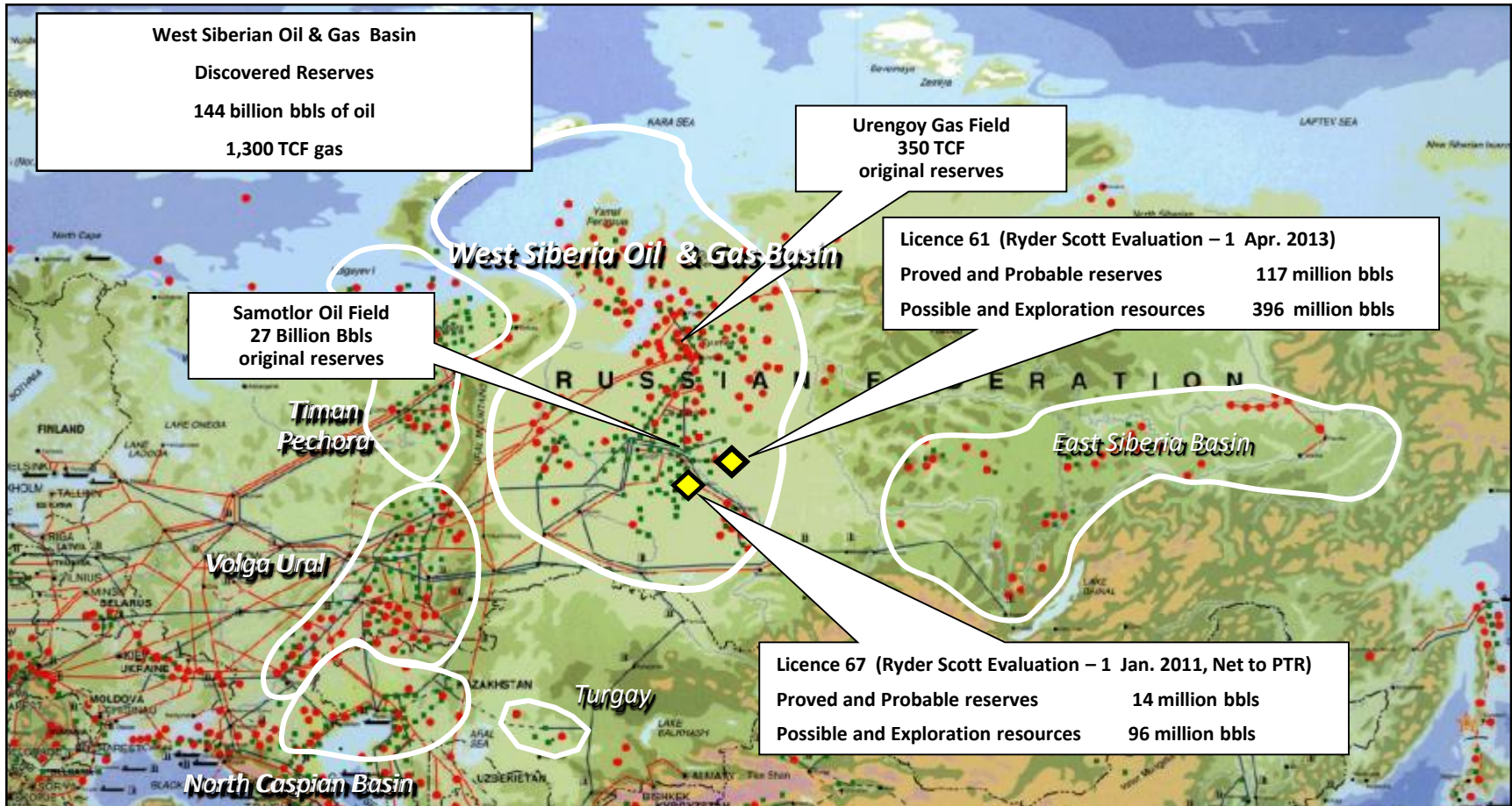


Development Drilling



All wells in programme can be drilled with one drilling crew





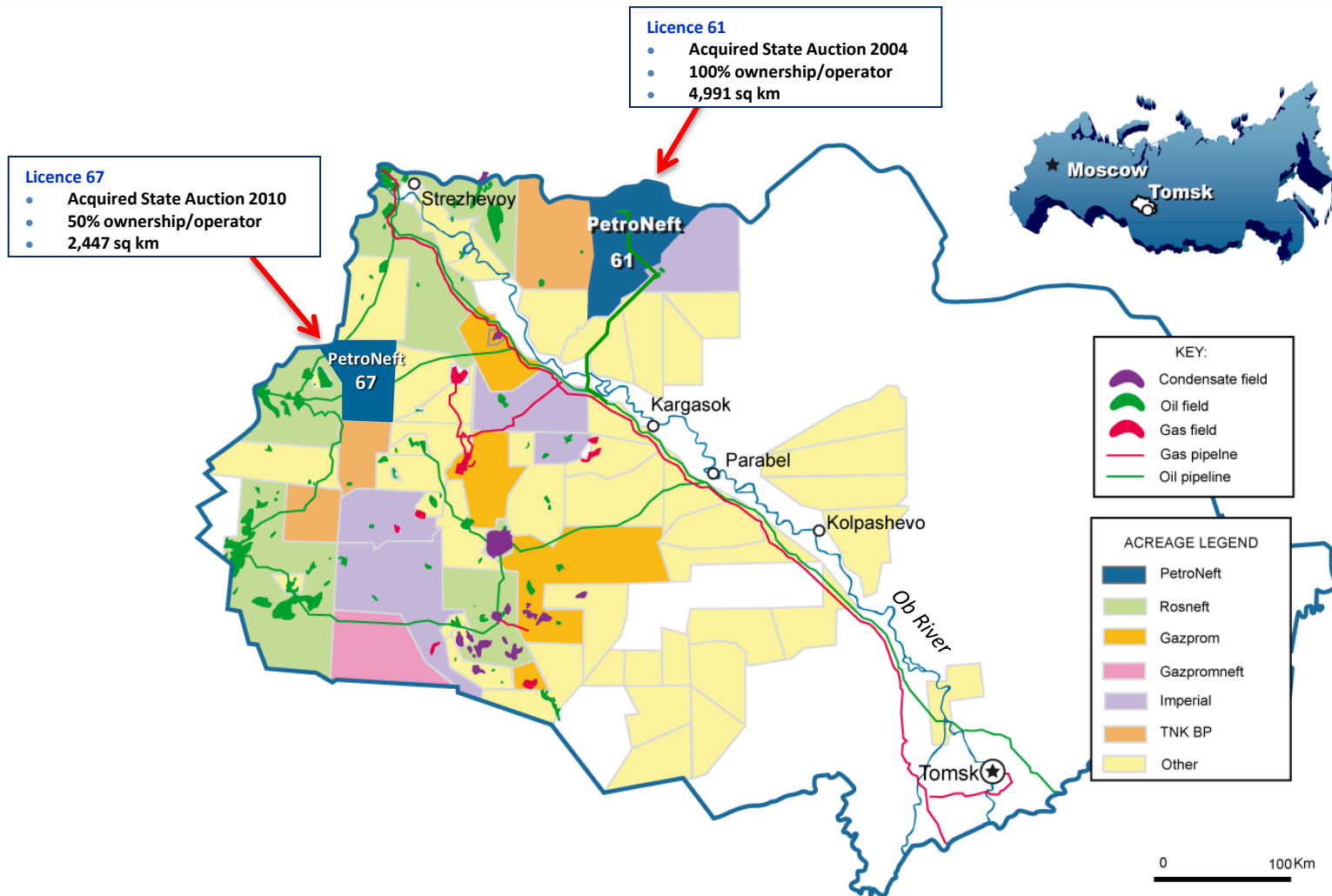
0 1,000  
Kilometers

— Gas Pipeline  
— Oil Pipeline

● Gas Fields  
● Oil Fields

◆ PN Licences

Source – USGS



**Tomsk Oblast: Very active region with significant exploration upside**

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



## Licence 61



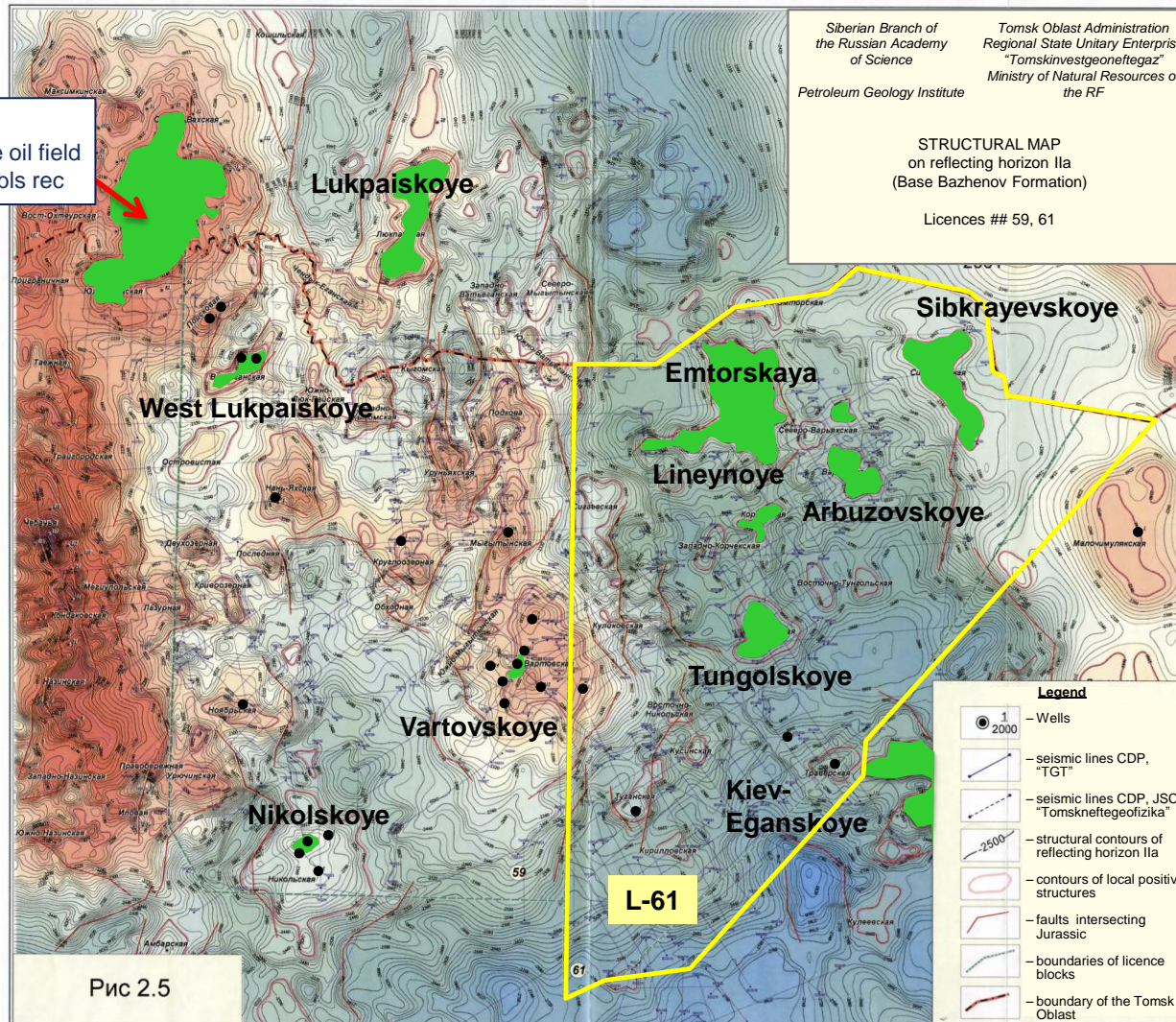




## Structural Map at base of Bazhenov Formation showing hydrocarbon accumulations

### Giant Vakhskoye

➤ Giant Vakhskoye oil field  
orig. 1.2 billion bbls rec



## Licence 61 Development Plans

### ➤ 2010/11: Lineynoye

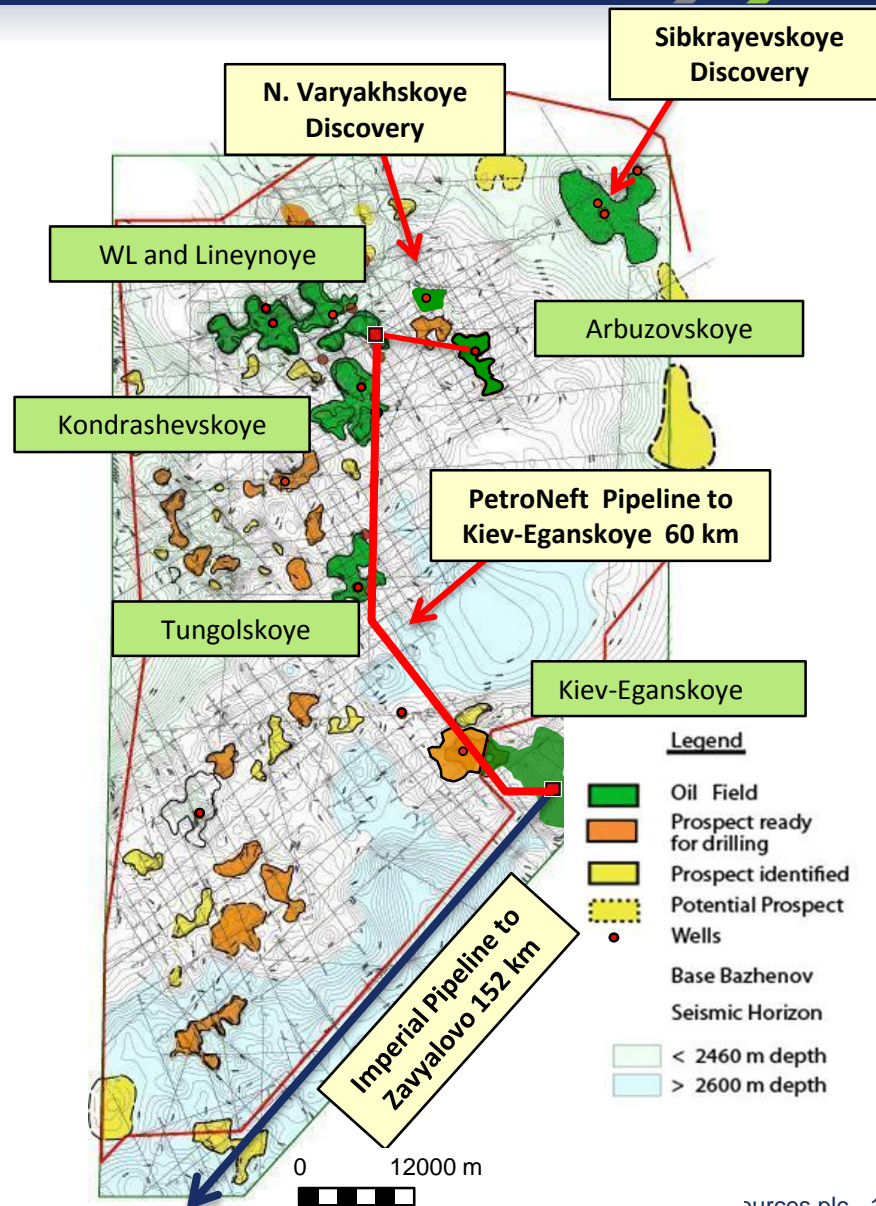
- Construction of 60 km oil pipeline
- Processing/storage facilities completed and expanded to  $\pm 14,800$  bpd
- Drilled 9 oil wells Pad 1, 12 wells Pad 2
- Hydraulic fraced wells on both pads
- Commenced production in August, 2010

### ➤ 2012/13: Arbuzovskoye and W Lineynoye

- Construction of 10 km pipeline completed
- Commenced drilling new production wells at Pad 1 – 6 wells drilled to date
- Drilled Lineynoye No. 9 obligation well

## Future Plans

- Continued development drilling at Arbuzovskoye
- Exploration/Delineation Drilling
  - Tungolskoye (T-5)
  - Sibkrayevskoye (S-373)
- Additional seismic data at Sibkrayevskoye, other
- Future Development of Tungolskoye, Sibkrayevskoye, West Lineynoye and other discoveries







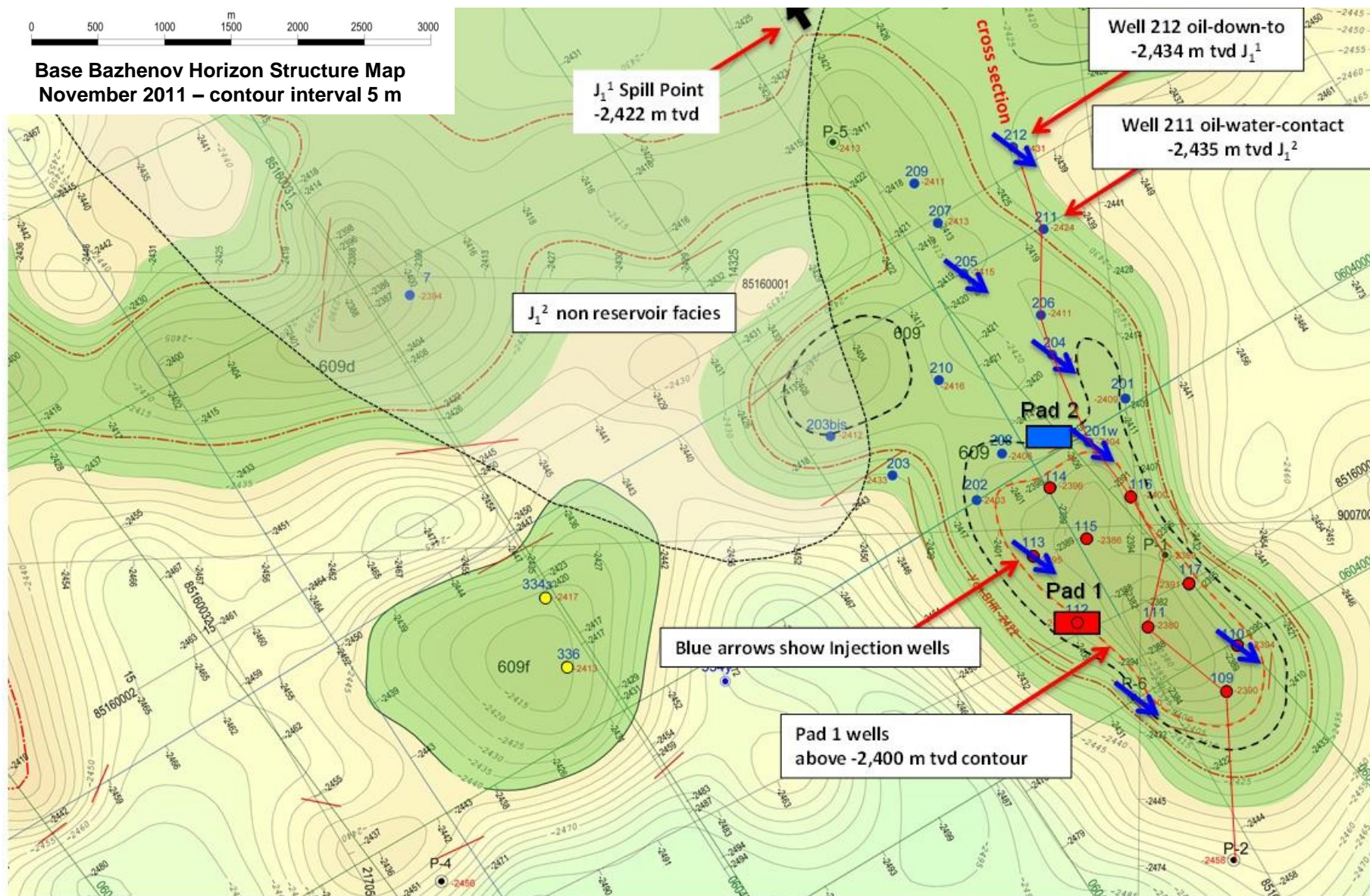
Process Facilities July 2012





0 500 1000 1500 2000 2500 3000  
m

**Base Bazhenov Horizon Structure Map  
November 2011 – contour interval 5 m**



# Pad 1 – Frac Design, Grouped by Size

Best wells had the largest frac's

Northwest

Southeast

Well	#	116	114	113	115	1	111	112	6	109	110	117
------	---	-----	-----	-----	-----	---	-----	-----	---	-----	-----	-----

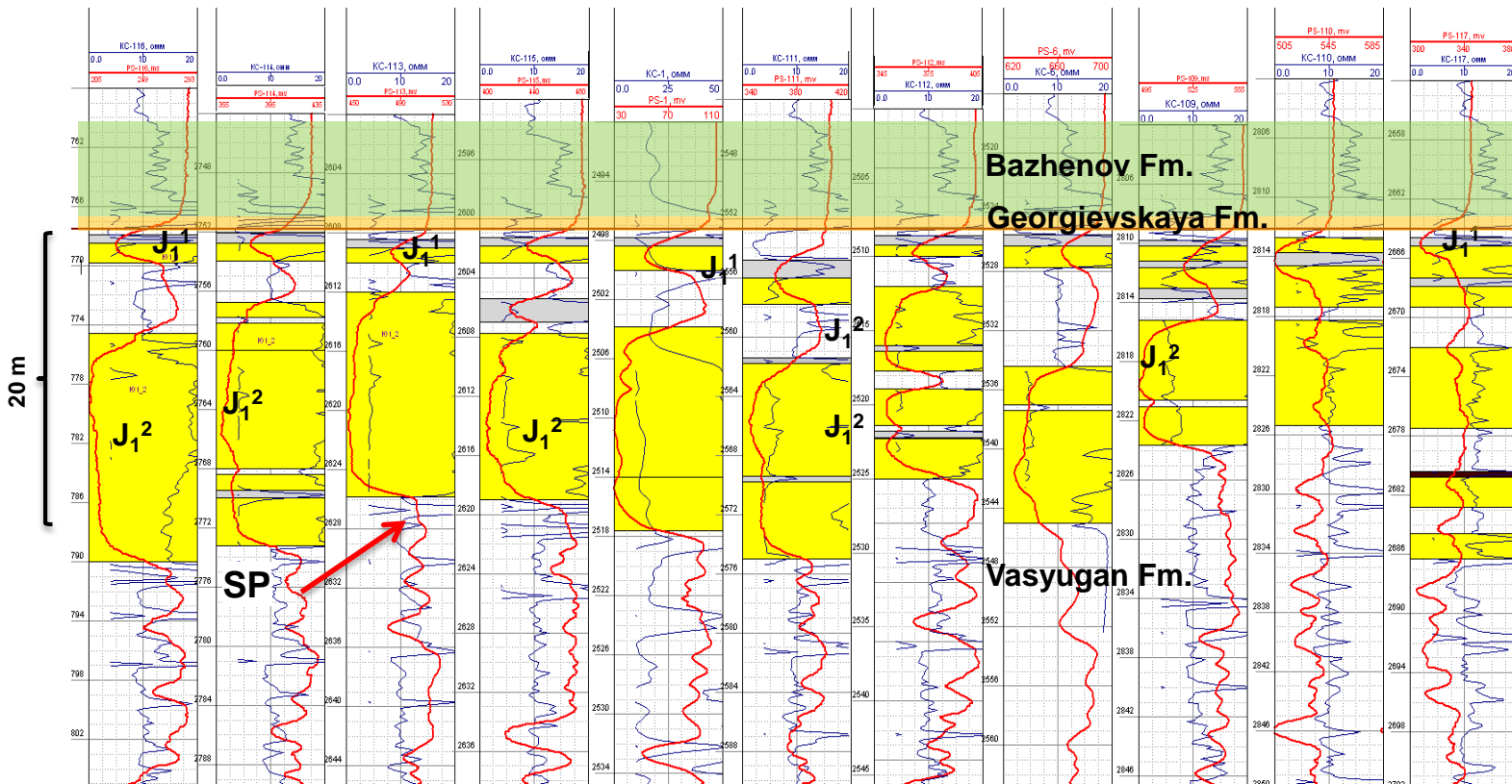
Frac Size  
tons

50 to 80 t

30 to 35 t

8 to 12 t

no frac



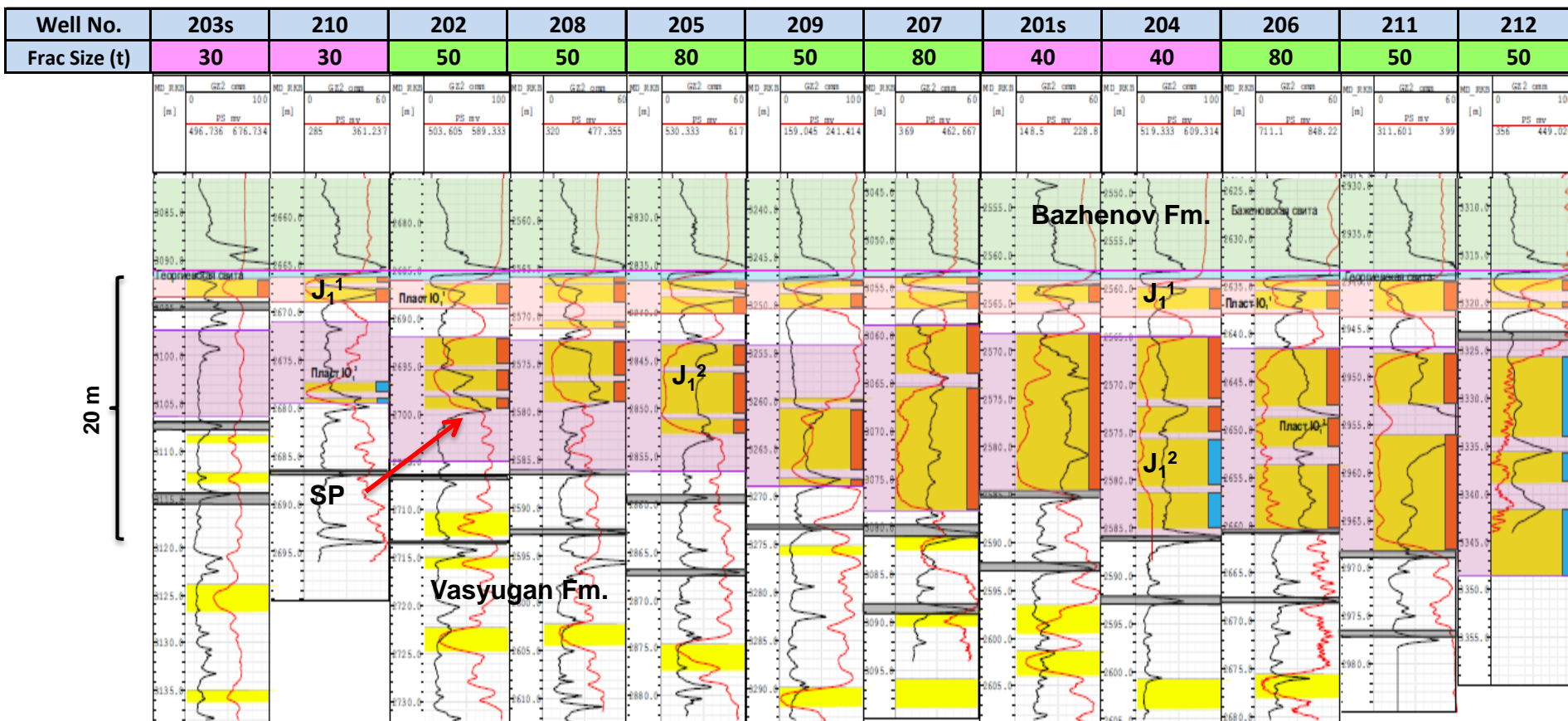
Well	#	116	114	113	115	1	111	112	6	109	110	117
net pay	m	17.9	15.8	14.7	14.0	15.4	16.0	12.0	11.4	10.2	8.9	10.80
Frac	tons	80	35	30	30		50	35		50	12	8
Length	m	149	96	89	87		144	91		153	67	65





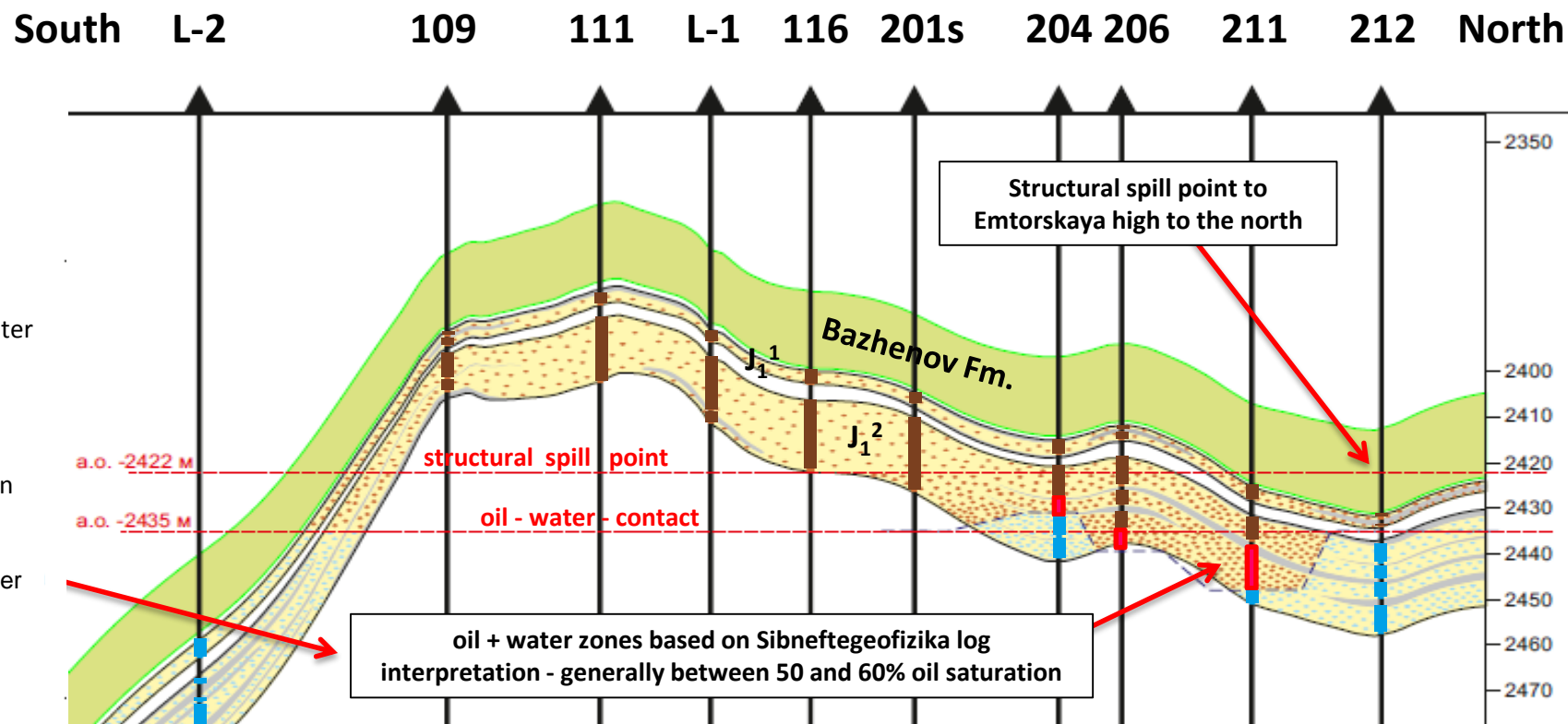
West

East



Note – All wells fracture stimulated in November 2011 except for wells 210 and 212 which will be fracture stimulated in Q1 2012

- Pad 2 wells show thick  $J_1^2$  reservoir sequence extending to the north from Pad 1
- Drilling results also show facies change of  $J_1^2$  sandstone to shale from east to west

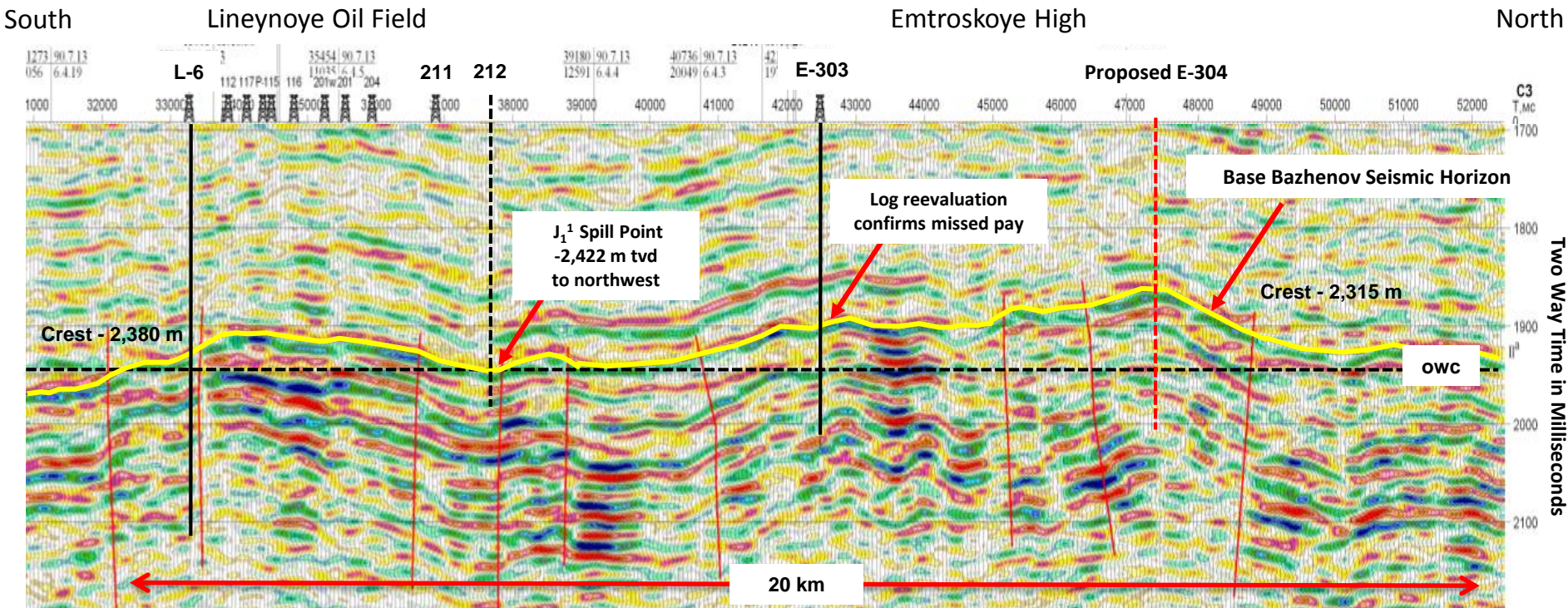


- The Pad 2 wells were all lower on the structure than the Pad 1 wells, the reservoir section was closer to the oil-water-contact and the water saturation in the wells was higher.
- The reservoirs on Pad 2 also appear to be tighter than Pad 1. The combination of relative permeability and fractional flow effects in the reservoir contributed to lower flow rates and higher initial water cut in the wells than expected.
- In the future, additional core, pressure data and flow data will be acquired on development wells as they are drilled and completed.
- We will also target wells higher on the structure to avoid producing from oil-water transition zones.
- Poor results at Pad 2 were not a result of drilling practices or lack of 3D seismic, but were reservoir geology related.





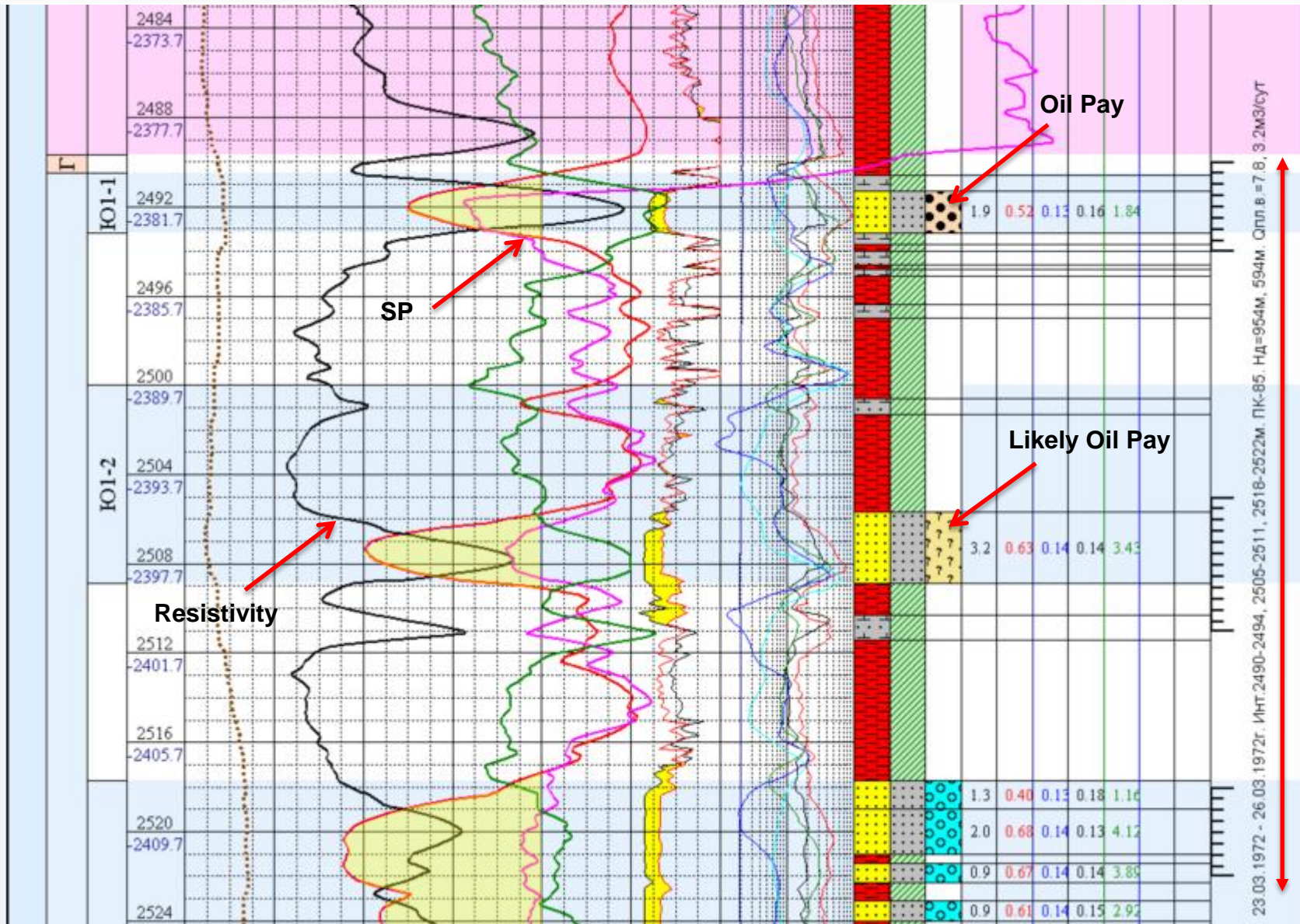




- As a result of the Lineynoye Pad 1 and Pad 2 drilling programmes the oil-water-contact was determined to be about -2,435 m tvd.
- This indicated that the structure was filled with hydrocarbons below the previously interpreted spill point of -2,422 m and that Lineynoye and Emtorskoye are one continuous oil field at the J1-1 interval. Emtorskoye is both larger in area and higher structurally than Lineynoye.
- Emtorskaya wells 300 and 303 were reinterpreted and oil was confirmed in the J1-1 interval and potentially in the J1-2 interval in both wells.
- The reserves associated with this play could be large, > 40 million bbls for just the J1-1; however, the J1-1 is usually only around 2 metres in thickness and it is difficult to develop on its own. Further delineation will be required to confirm those areas where a thicker J1-2 sandstone is present below the J1-1 interval.
- Emtorskaya well 304 located on the crest of the high is proposed. This well is about 65 m higher than the Lineynoye field at the J1-1 level.

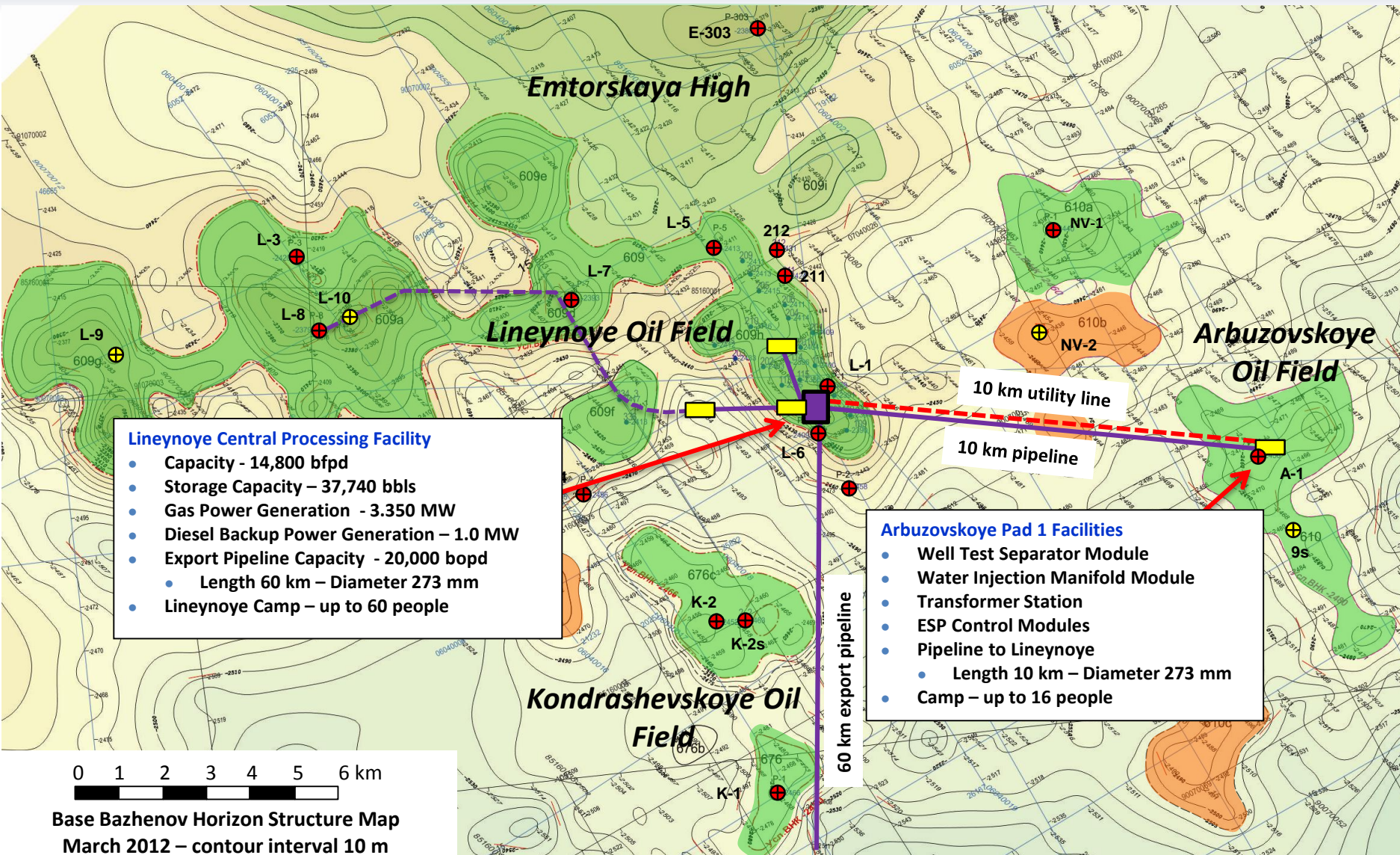


# Emtorskaya No. 303 Well Log



Note – Combined flow test of three intervals did not properly test the top two zones with potential hydrocarbon saturation shown by TKG log re-evaluation.









TBNG Production Drilling Rig

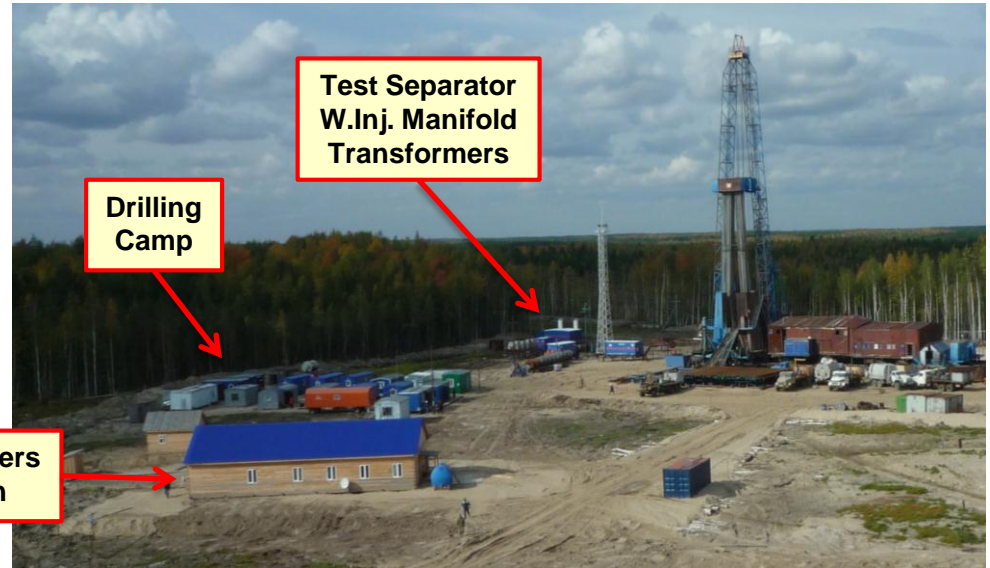




# Arbuzovskoye Pad 1 – “The Kit”

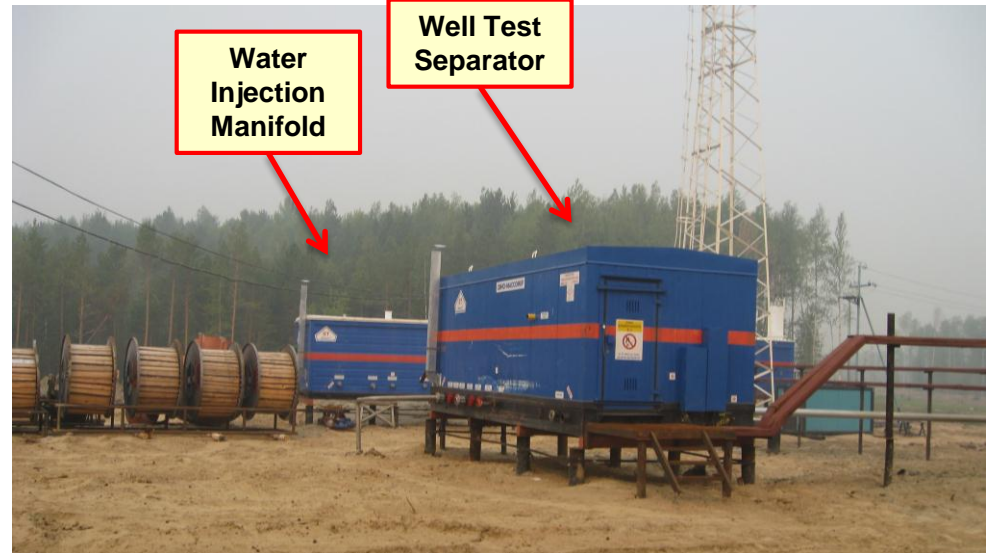


Living Quarters  
& Canteen



Drilling  
Camp

Test Separator  
W.Inj. Manifold  
Transformers

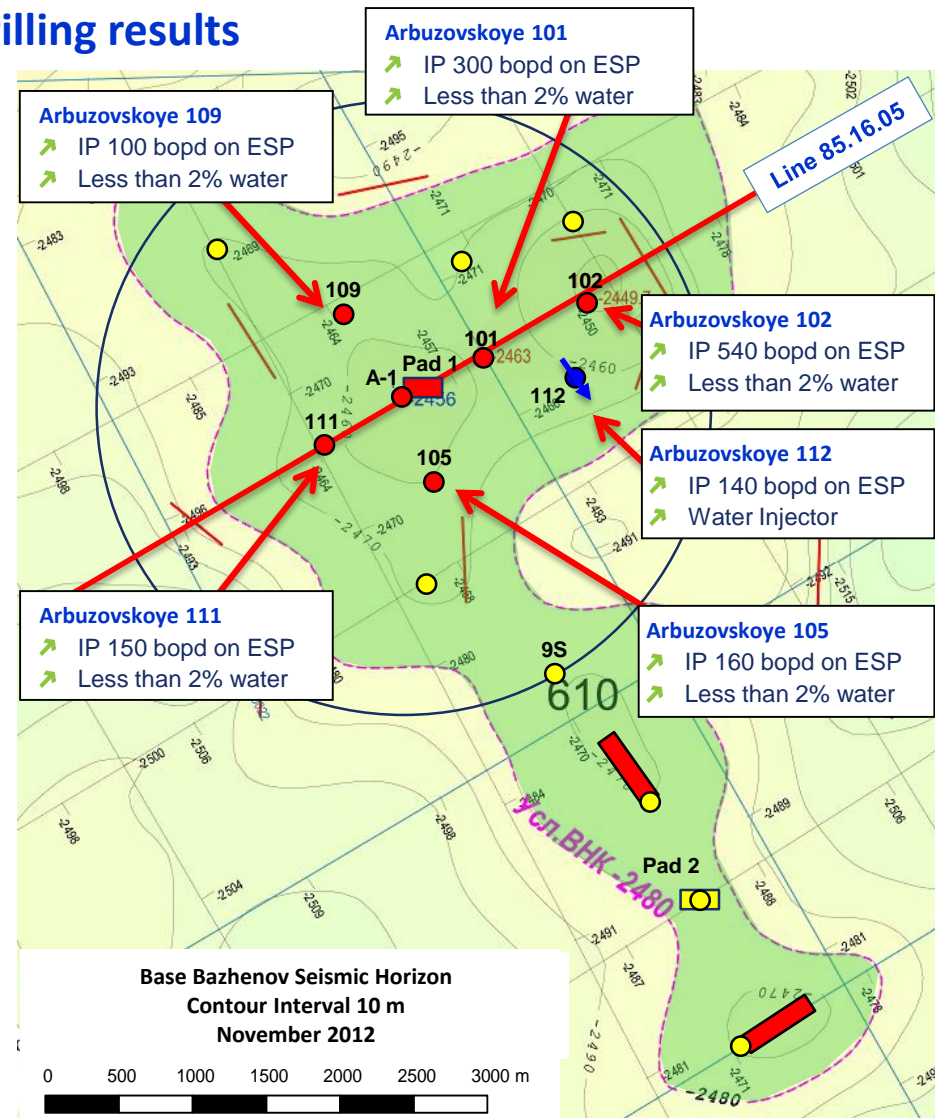


Water  
Injection  
Manifold

Well Test  
Separator

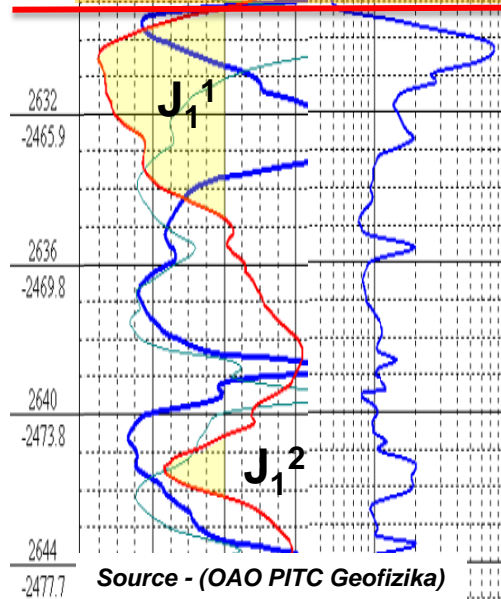
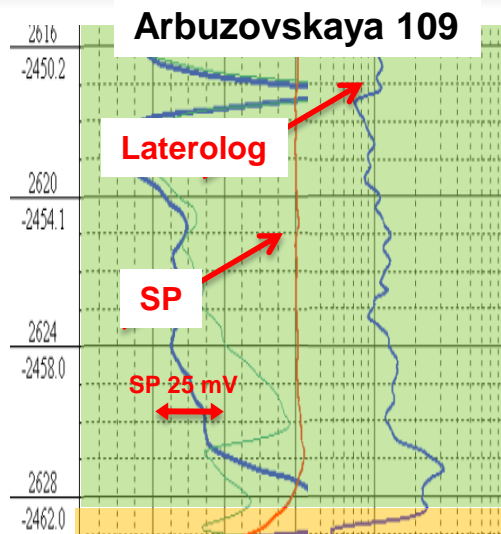
## Development has been revised based on drilling results

- Pilot production commenced in Jan 2012 with Well A-1 brought online at >300 bopd
- Six wells drilled and brought onstream winter 2012/13. All wells were completed with ESP's and had Initial production of ≥100 bopd
- Water cut less than 2%
- Water injection started with conversion of A-112 well in late April – now seeing start of production response in well 102
- Plans for up to 5 additional wells to be drilled on Pad 1 during 2014
- Future Well 9s strategically located to maximise information gathering for Pad 2 well locations
- Horizontal wells will be considered for the development of the southern portion of the field based on reservoir geometry and shape of the structure

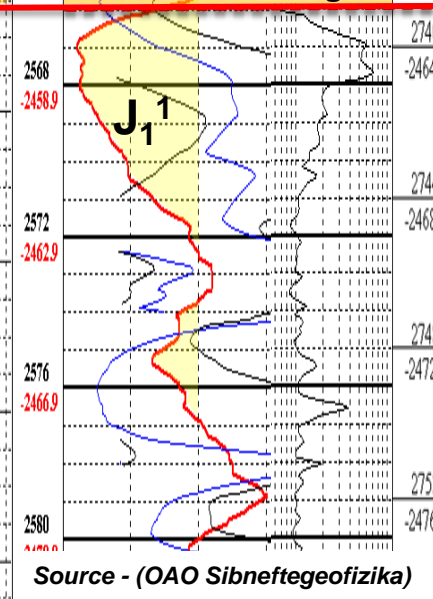
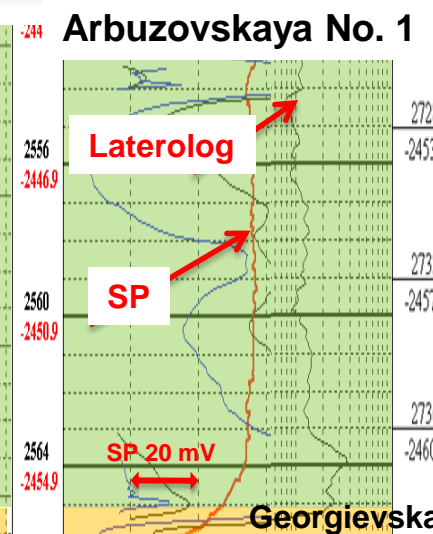




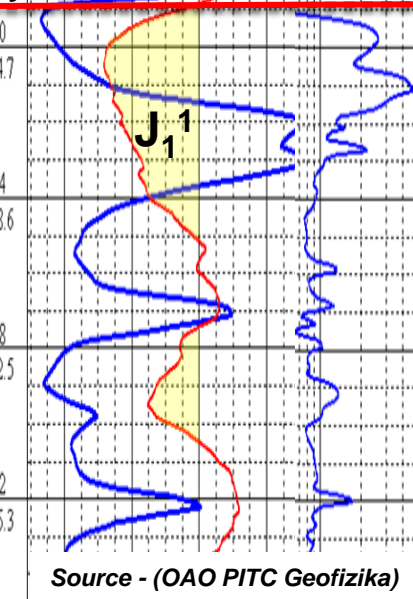
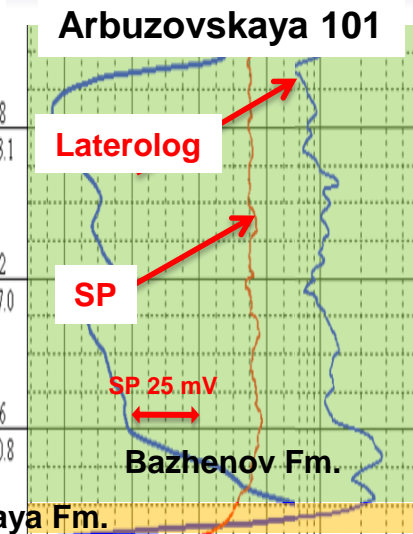
# Arbuzovskaya 109, No.1, 101 & 102



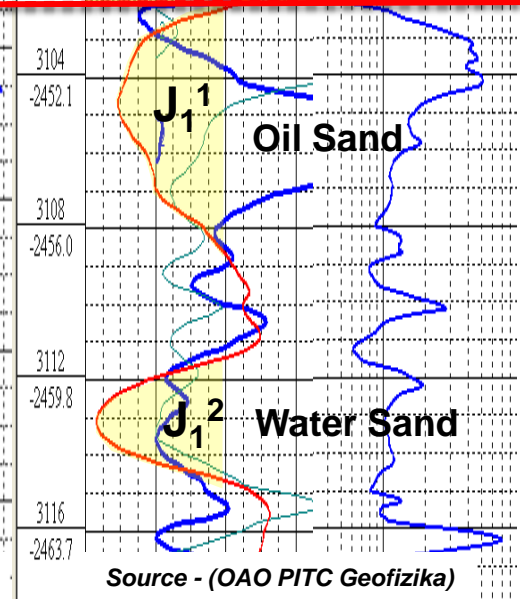
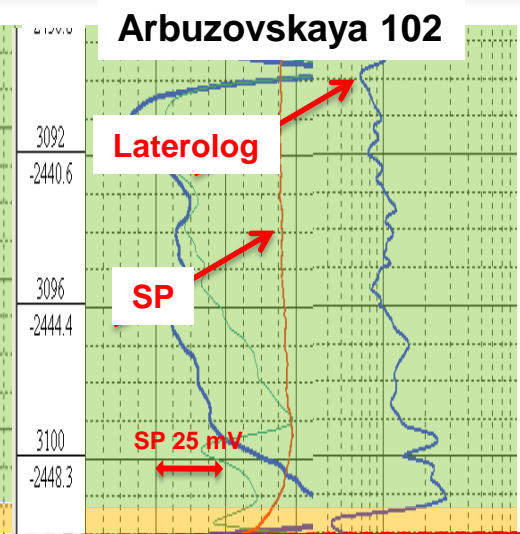
Source - (OAO PITC Geofizika)



Source - (OAO Sibneftegeofizika)

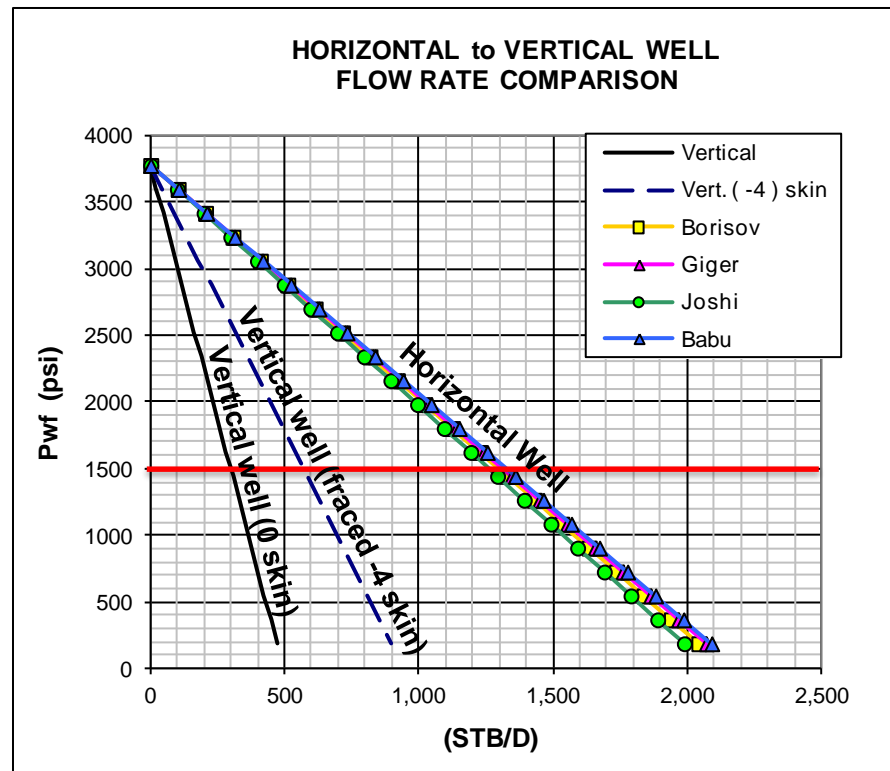
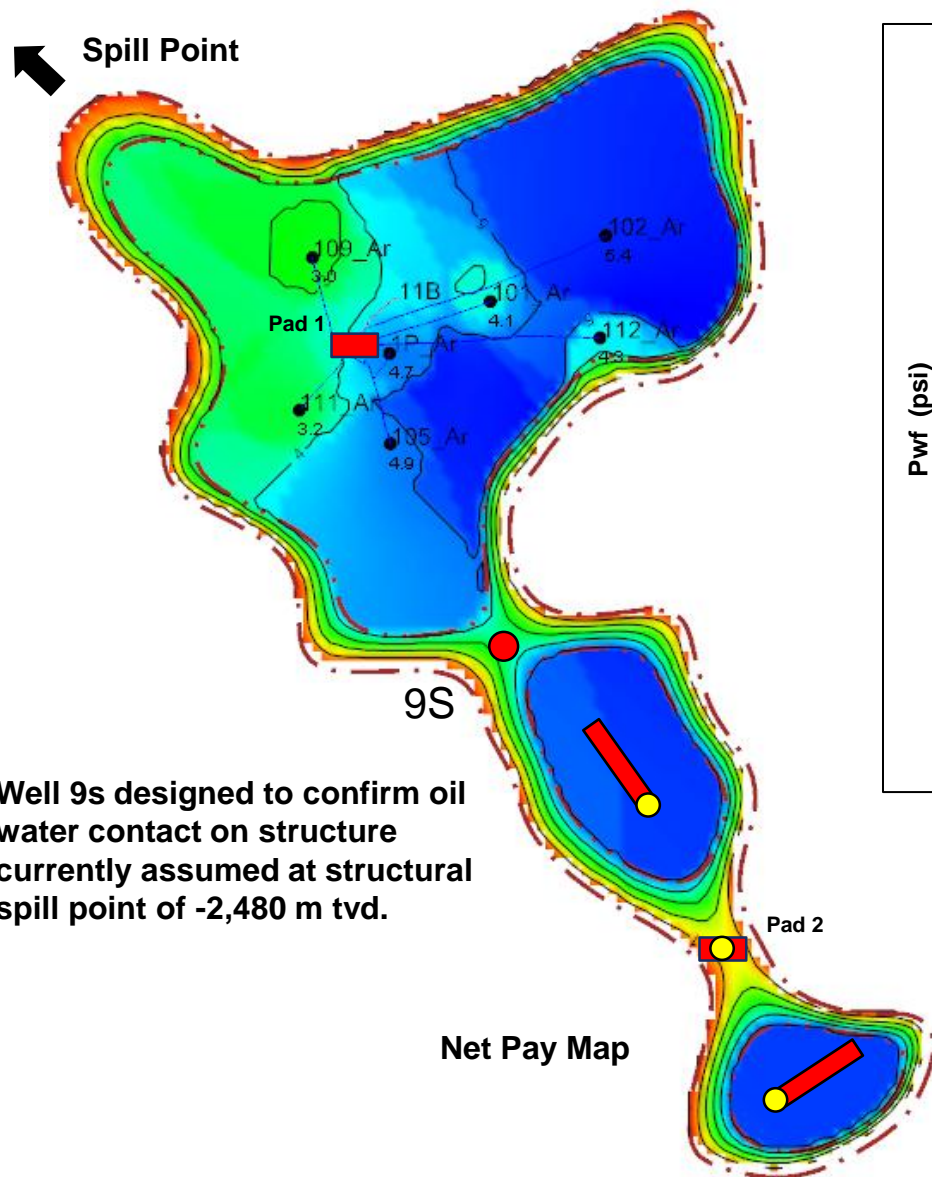


Source - (OAO PITC Geofizika)



Source - (OAO PITC Geofizika)



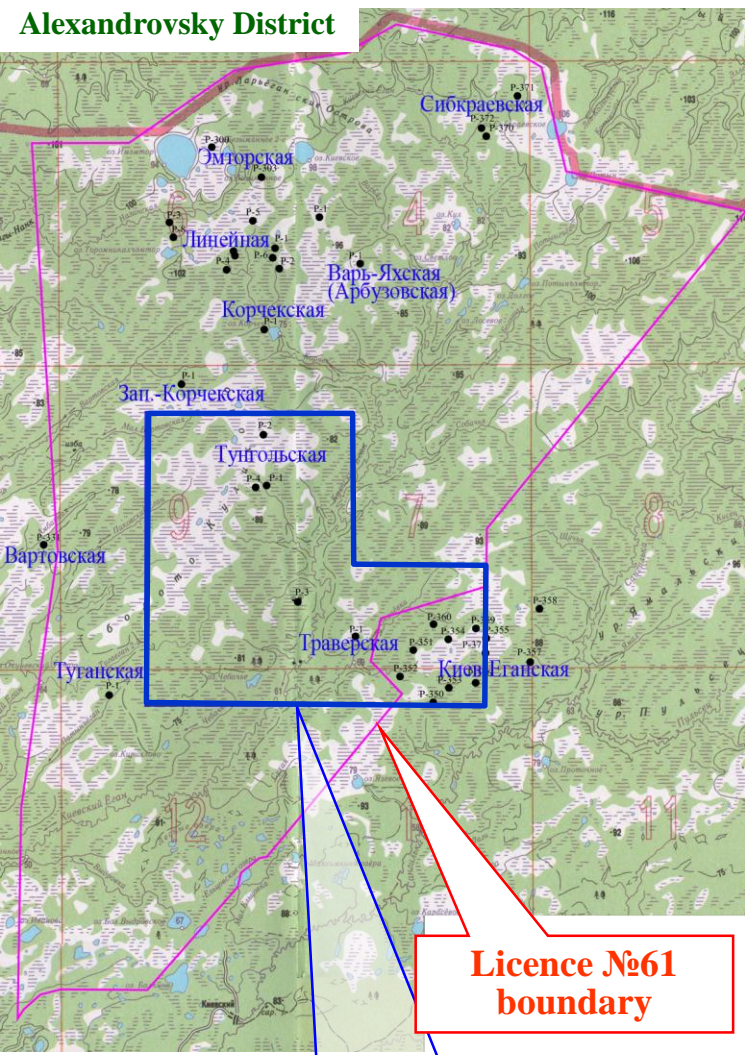


Net pay = 4 m  
Permeability = 15 mD  
Horizontal Segment = 300 m



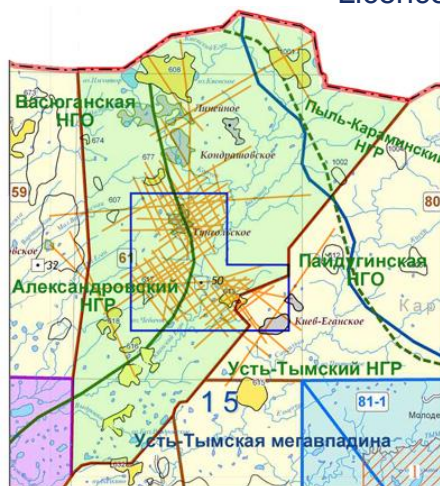
## Overview map

### Alexandrovsky District



**Licence №61  
boundary**

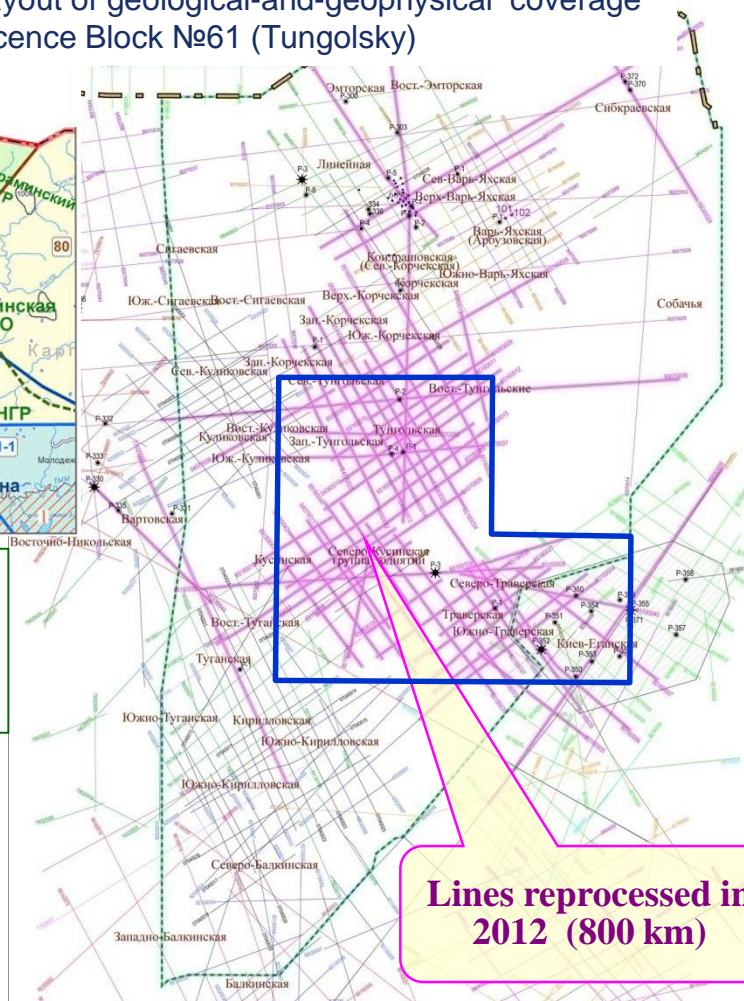
**Project area boundary**



Project area lies within  
Ust-Tymsky petroleum  
district of  
Paiduginskaya  
petroleum area

2D seismic grid density  
within project area is  
 $0.91 \text{ km/km}^2$   
 $S=1,012 \text{ km}^2$

## Layout of geological-and-geophysical coverage Licence Block №61 (Tungolsky)



**Lines reprocessed in  
2012 (800 km)**

Seismic data are represented by the materials: s/l 2/77-78, 16/80-81, 16/85-86, 18/85-86, 7/90-91, 5/99-00 TGT and s/l 4/06-07 JSC  
“Stavropolneftegeofizika” – CDP-2D high resolution seismic survey





## Tungolskoye Development

### 2012/2013 programme:

- TKG re-processing and re-evaluation of well and seismic data
- Significant portion of structure updip from T-1 and T-4 wells which had over 10 m net pay

### 2014 programme:

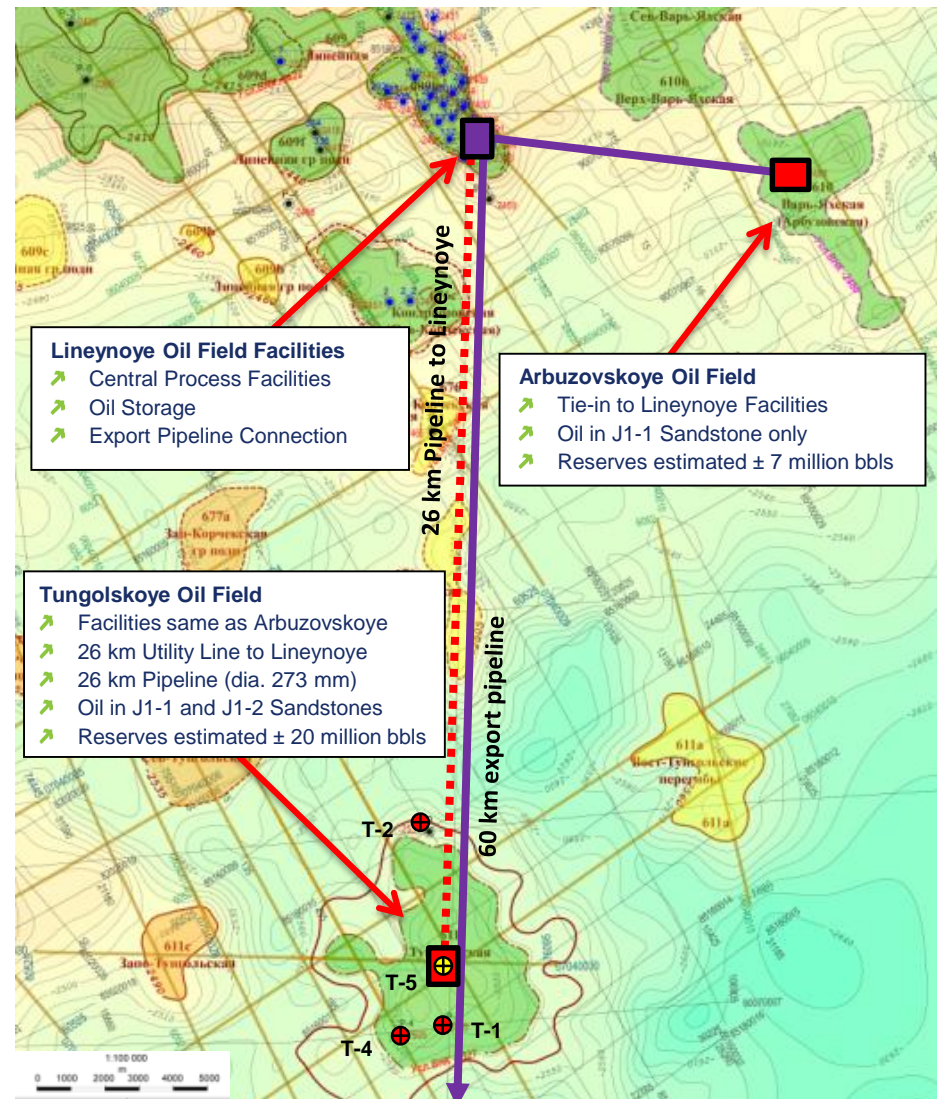
- Q1 mobilize rig for T-5 well
- Drill, core and test T-5 well with horizontal segment
- Russian State Reserve (GKZ) approval
- Pilot Production Project (CDC) approval

### Potential 2015 programme:

- Construction of 26 km pipeline from Lineynoye Central Processing Facility – Q1
- Construction of Pad 1 and mobilisation of development drilling rig and supplies – Q1
- Commence drilling from Pad 1 – Q2

### Risk Mitigation

- Confirm structure and reservoir with T-5 well
- Confirm flow test in 300 m horizontal segment
- Potential for horizontal wells to greatly reduce the cost and time required for development







## Tungolskoye Development

### 2013 programme:

- TGK re-processing and re-evaluation of well and seismic data

### 2014 programme:

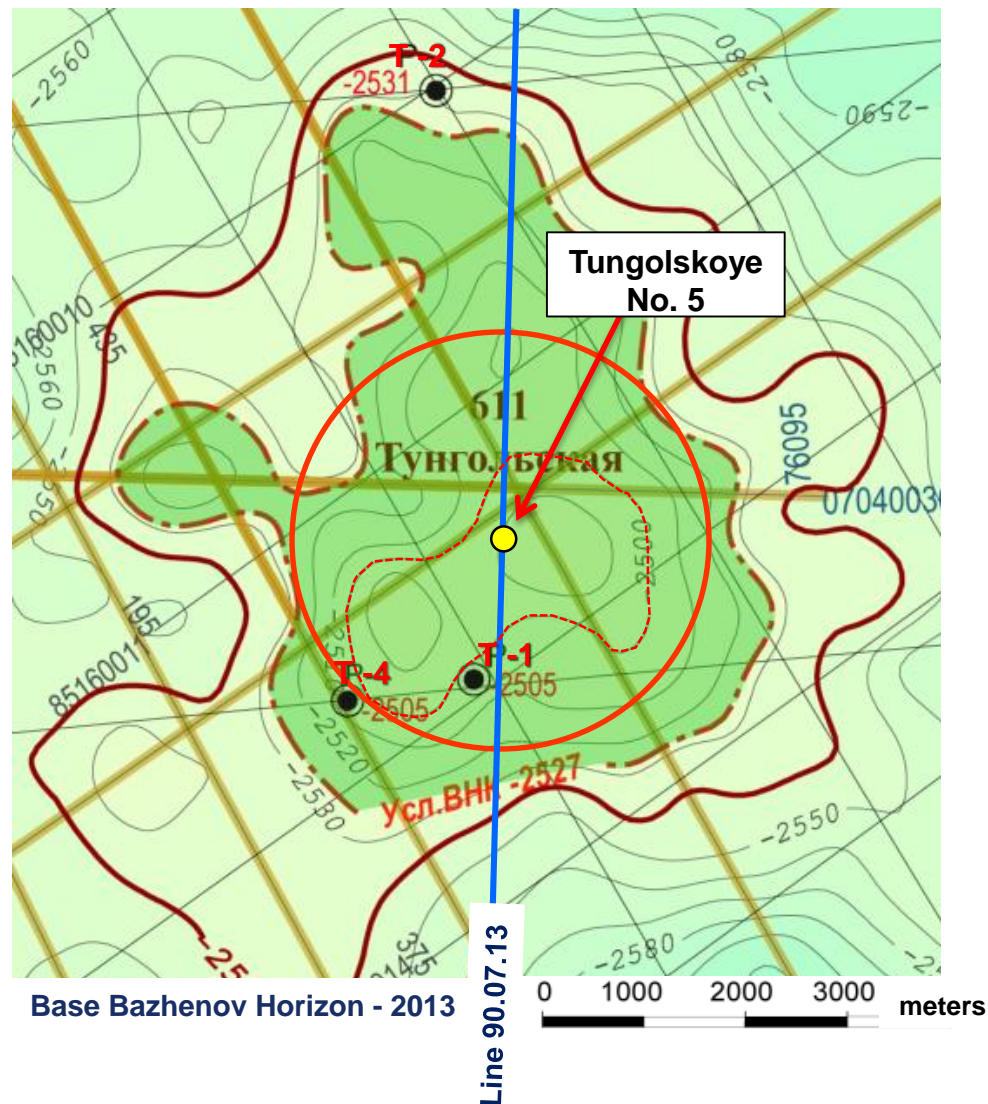
- Q1 mobilize rig for T-5 well
- Drill, core and test T-5 well
- Russian State Reserve (GKZ) approval
- Pilot Production Project (CDC) approval

### Potential 2015 programme:

- Construction of 26 km pipeline to Lineynoye Central Processing Facility – Q1
- Construction of Pad 1 and mobilisation of development drilling rig and supplies – Q1
- Commence development drilling programme

## Risk Mitigation

- Confirm structure and reservoir with T-5 well
- Confirm flow test in 300 m horizontal segment
- Initial development wells are low risk and located to better define stratigraphy and structure of the field prior to drilling additional wells (w/in -2,500 m tvd contour)

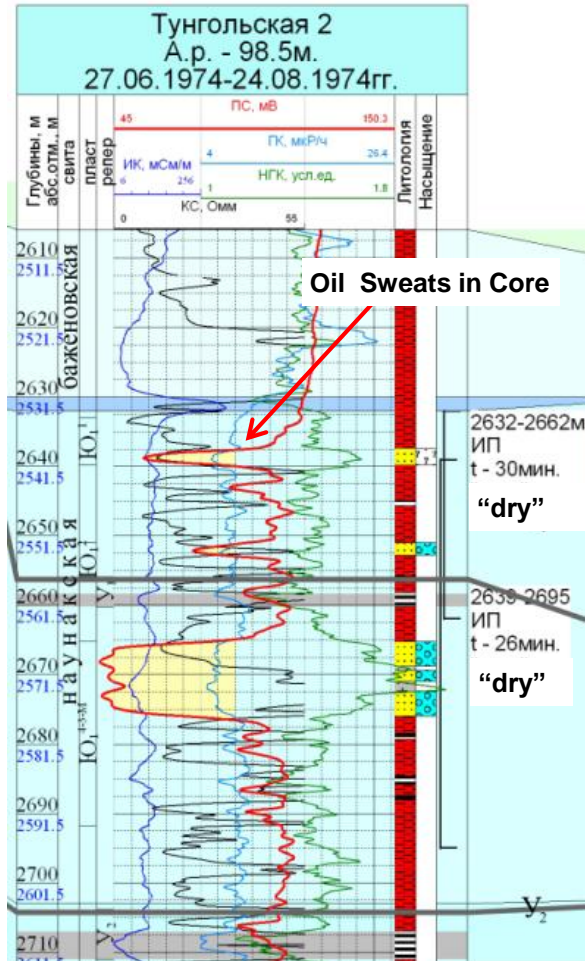




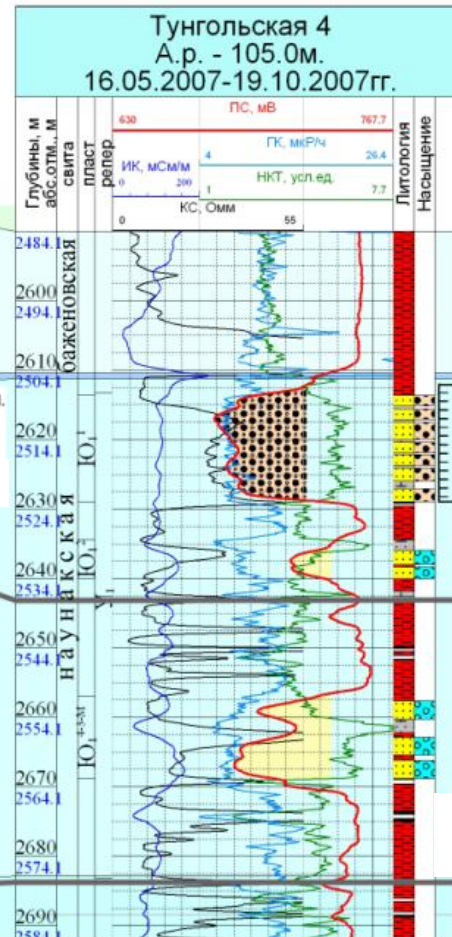




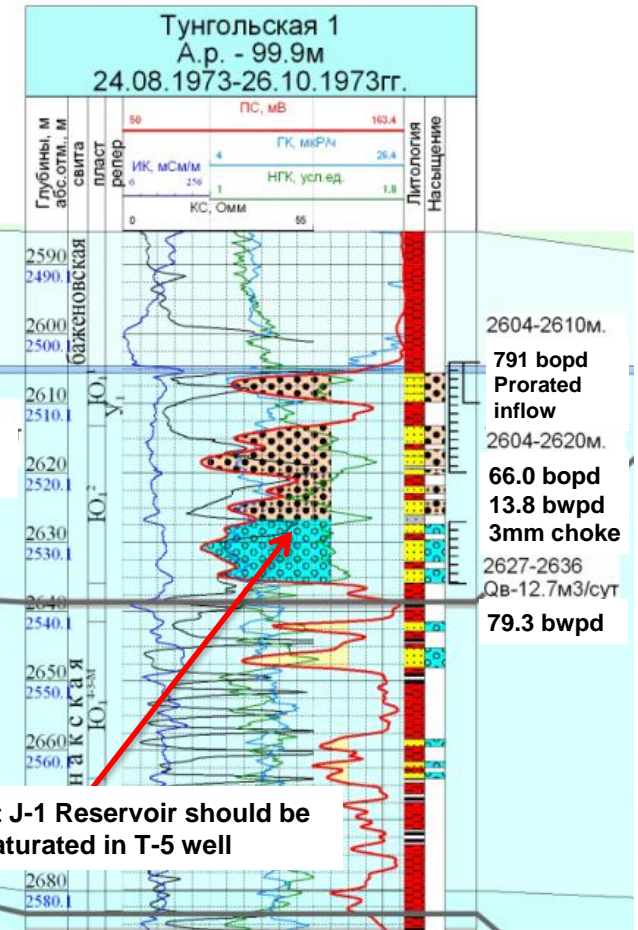
## Tungolskoye No. 2



## Tungolskoye No. 4



## Tungolskoye No. 1



Lowermost J-1 Reservoir should be oil saturated in T-5 well





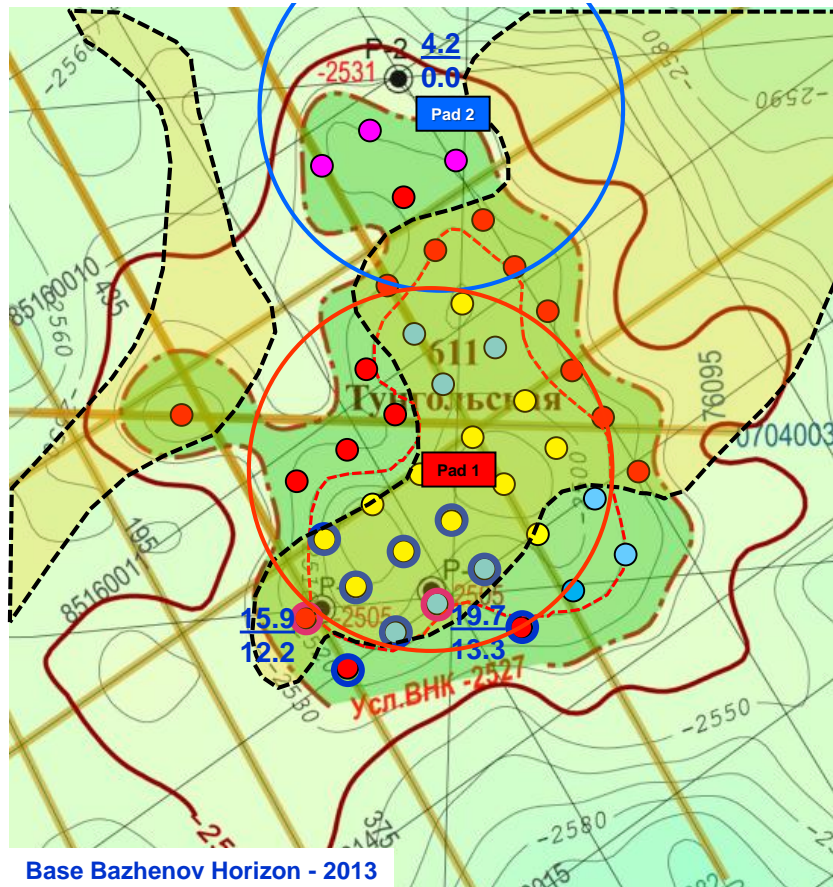
## Tungolskoye Development

- 38 wells (37 + T-5)
- 2 drilling pads
- 700 m well spacing

### Well Types Net Pay for Pad 1

Yellow circle	≥12.0 meters	12 wells Pad 1
Blue circle	12.0 meters	9 wells Pad 1
Red circle	7.5 meters	9 wells Pad 1

Total 30 wells



Base Bazhenov Horizon - 2013

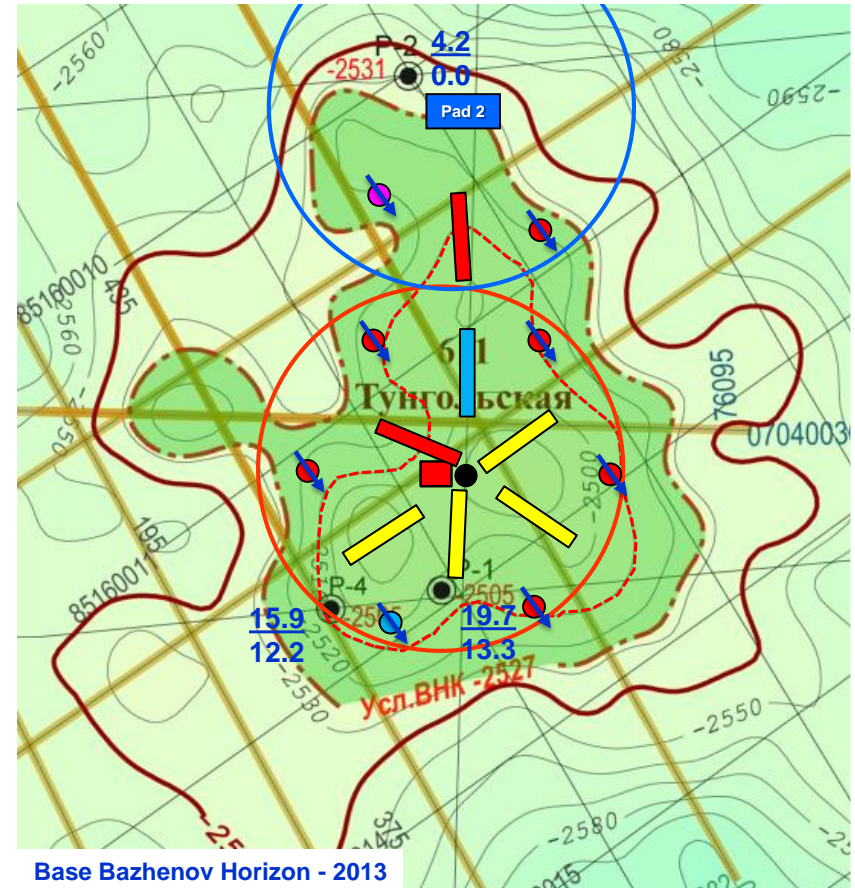
## Tungolskoye Development

- 7 Horizontal wells (6 + T-5)
- 8 Vertical wells (convert to injector)
- 2 drilling pads
- 1000 m Horizontal segments

### Well Types Net Pay for Pad 1

Yellow circle	≥12.0 meters	4H + 0V wells
Blue circle	12.0 meters	1H + 1V wells
Red circle	7.5 meters	1H + 5V wells

Total 6H + 6V wells

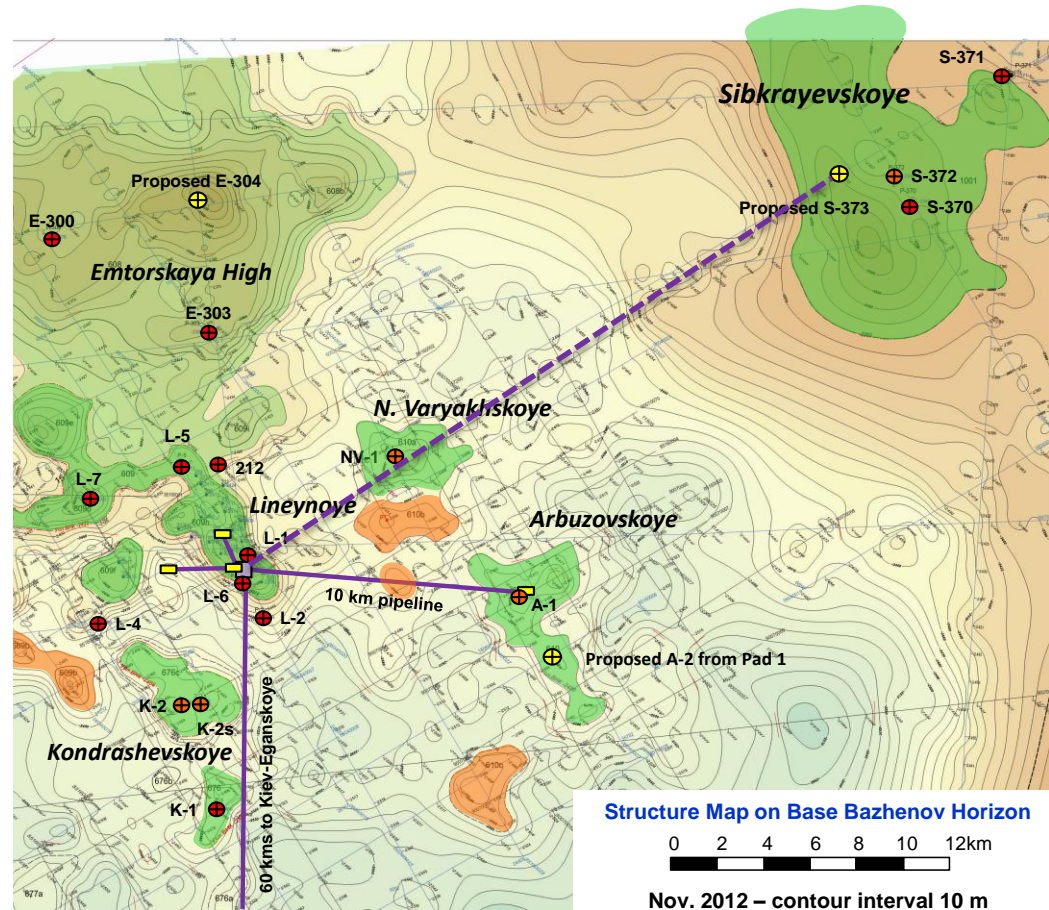


Base Bazhenov Horizon - 2013



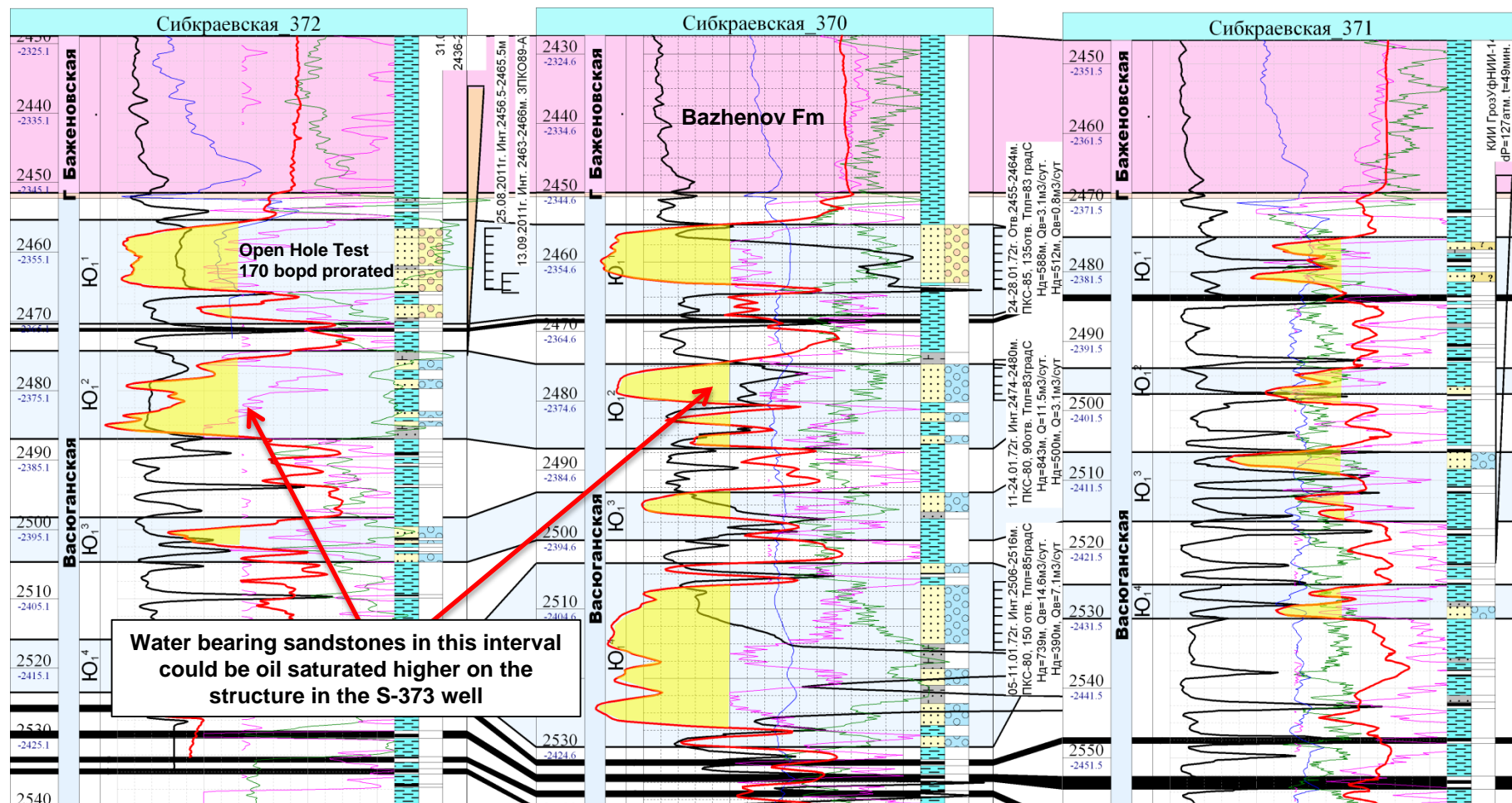
## Major discovery – expected on-stream 2016

- Three wells were drilled on the field to date
- Well 372 (2011) twinned well 370 was drilled by PetroNeft
- Well confirms 12.3 m of “missed pay”
- Open hole inflow test 170 bopd, 37° API
- Over 50 sq km of closure above oil-down-to level in well 372
- RS 2P reserves 53 million bbls
- Additional seismic and well data will be required to fully assess the discovery and register reserves for development
- PetroNeft is planning:
  - Well 373 with rig currently on location and additional 2D Seismic acquisition for 2014/15
  - Development decision in 2015
  - Will be tied back to Lineynoye CPF
  - Water injection for pressure maintenance





Oil Saturation interpreted in  $J_1^1$  interval in Soviet well 370 confirmed in well 372 drilled in 2011 – Major Discovery

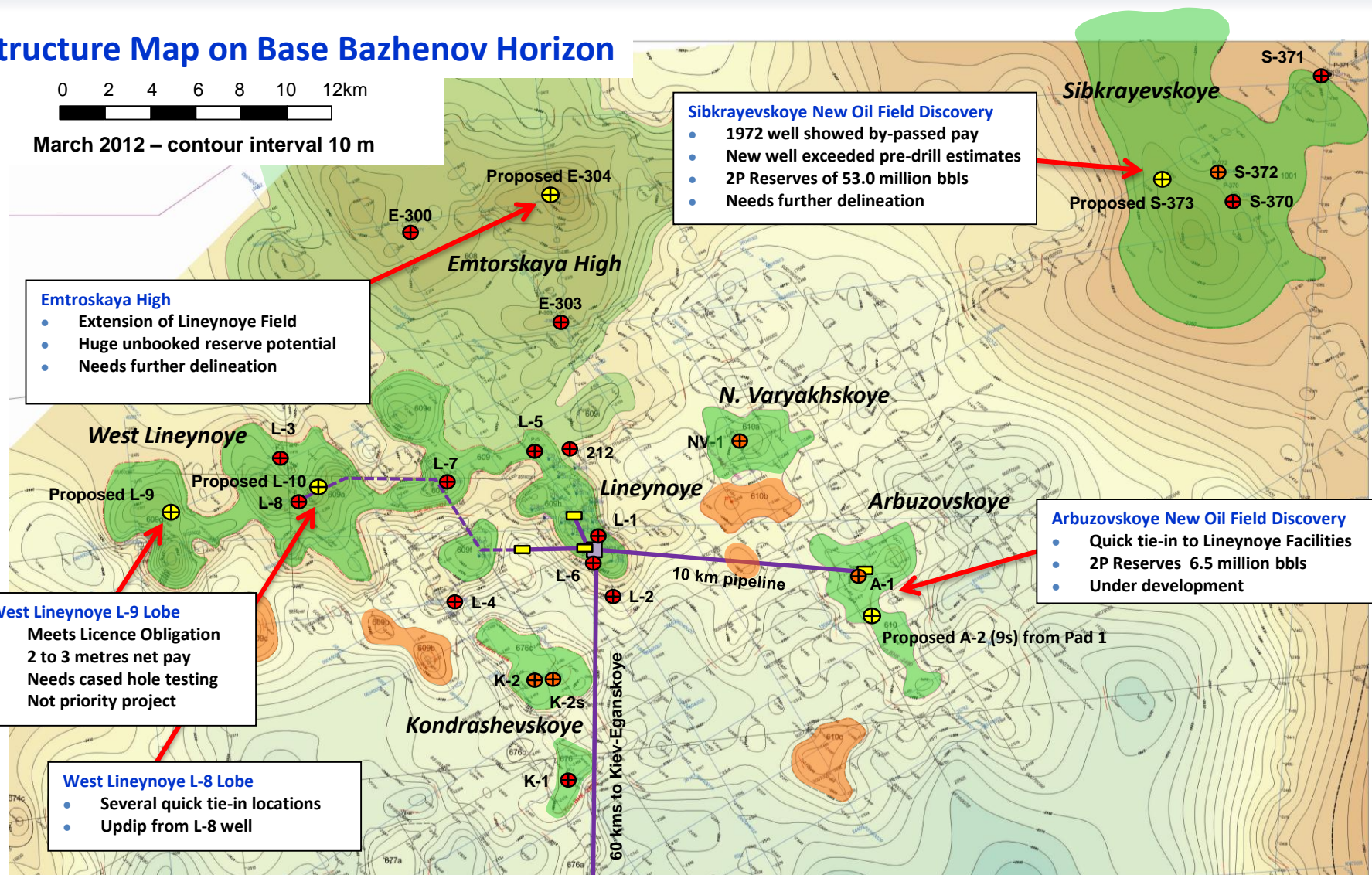




## Structure Map on Base Bazhenov Horizon

0 2 4 6 8 10 12km

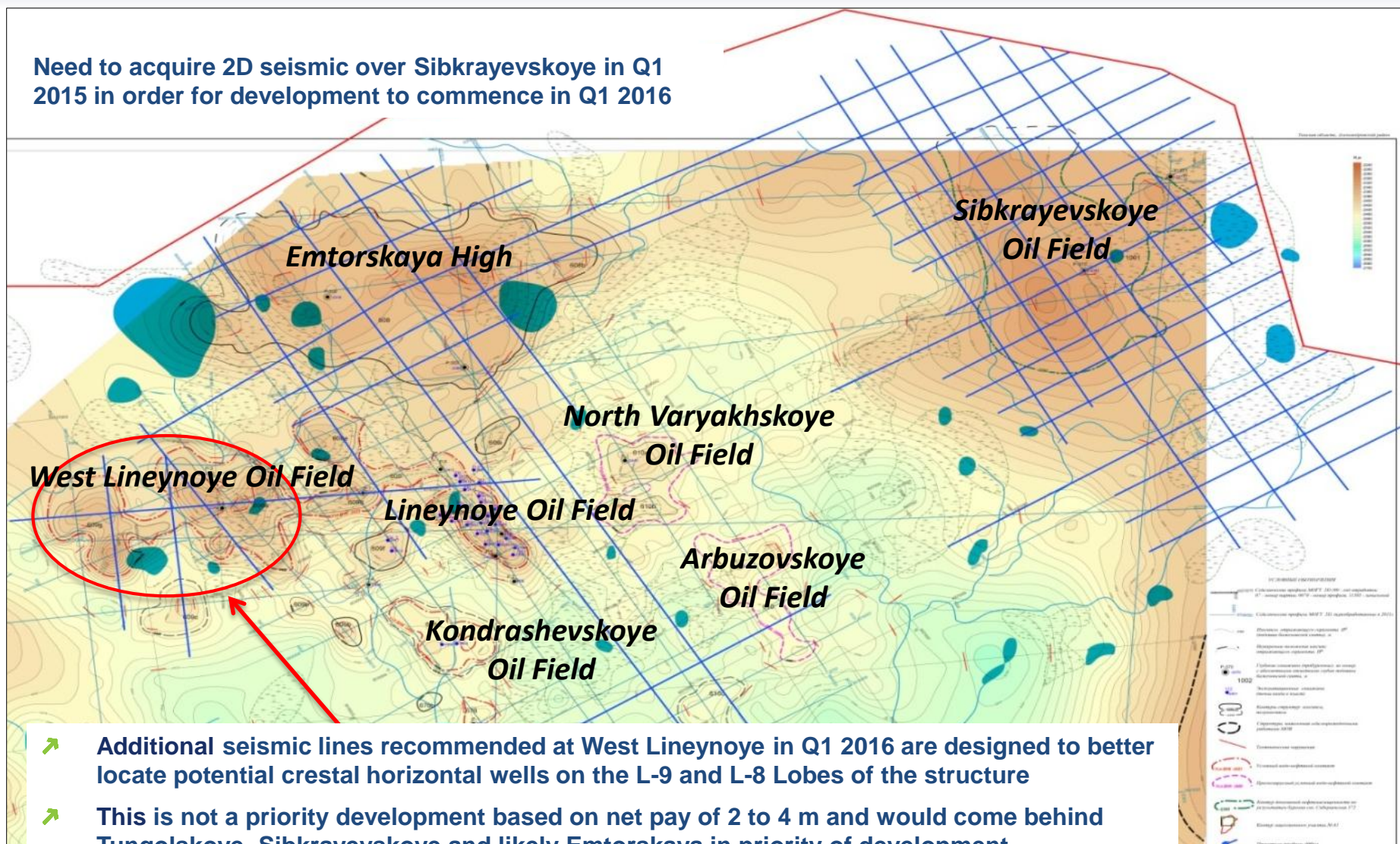
March 2012 – contour interval 10 m





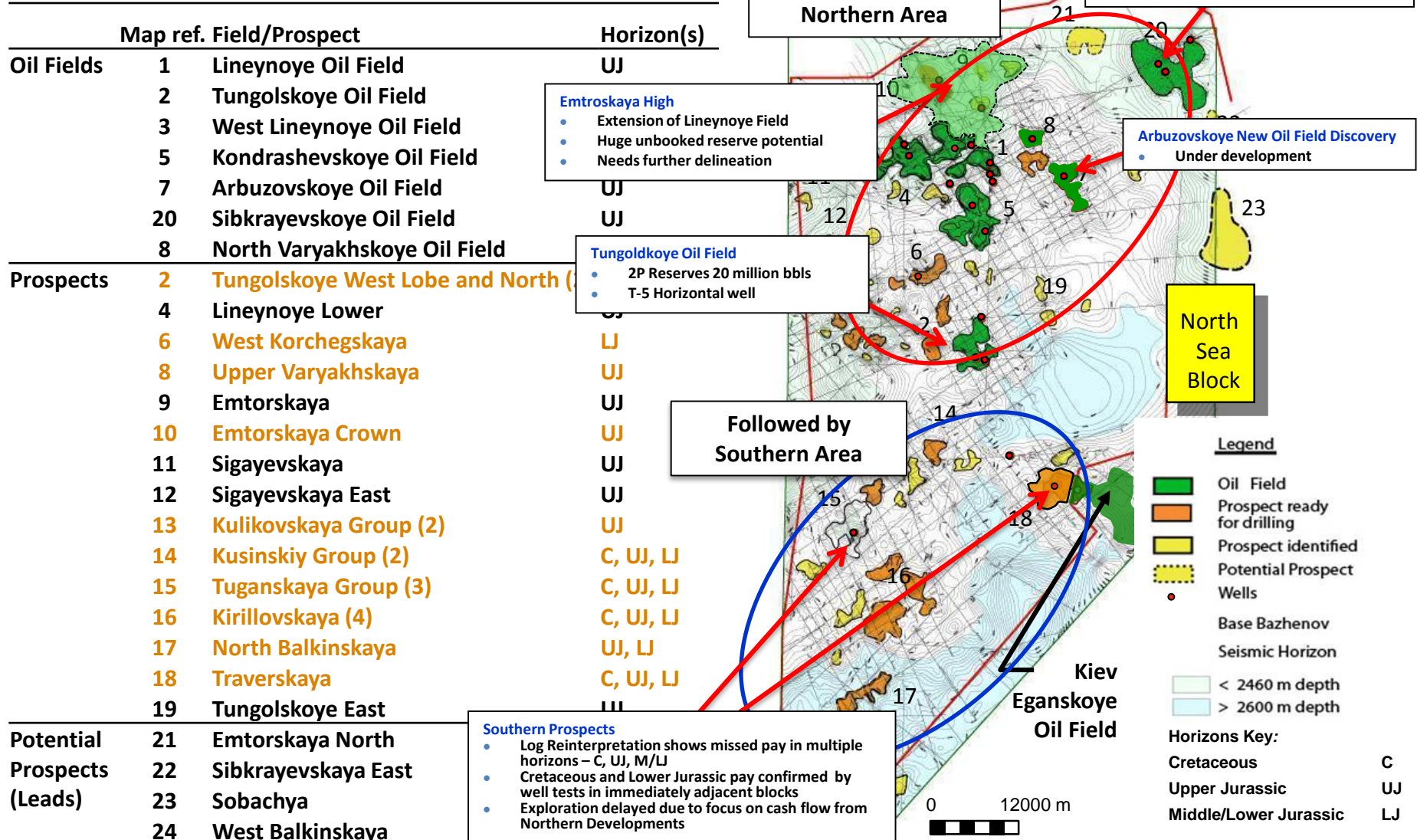


Need to acquire 2D seismic over Sibkrayevskoye in Q1 2015 in order for development to commence in Q1 2016



- Additional seismic lines recommended at West Lineynoye in Q1 2016 are designed to better locate potential crestal horizontal wells on the L-9 and L-8 Lobes of the structure
- This is not a priority development based on net pay of 2 to 4 m and would come behind Tungolskoye, Sibkrayevskoye and likely Emtorskaya in priority of development

## Oil Fields / Prospects / Potential Prospects







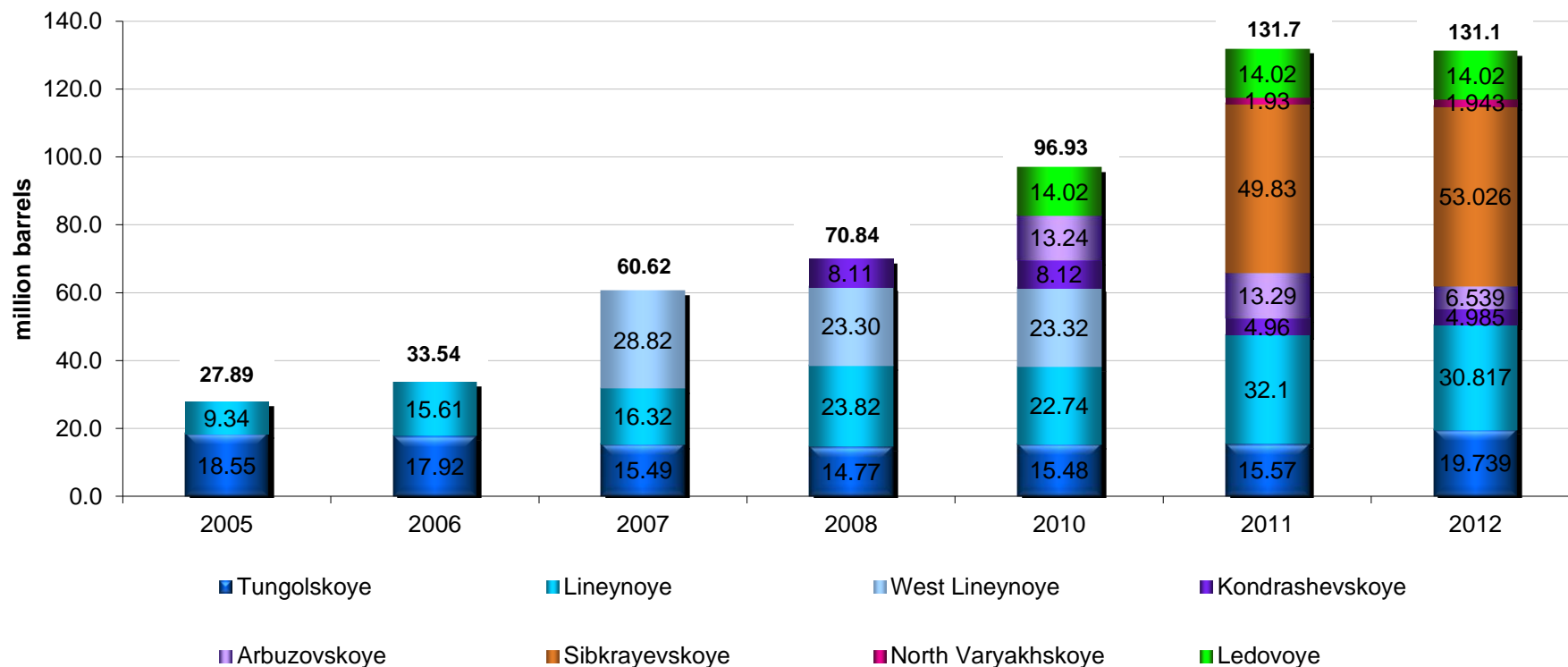
# Investment Highlights





## Track record of Reserve Growth:

Licence 61 & 67 2P Reserve Growth



- Source: Ryder Scott – Petroleum Consultants report as at 1 April 2013 for L-61, 1 Jan 2011 for L-67
- Lineynoye and West Lineynoye confirmed as one field in 2011
- PetroNeft has drilled a total of 13 exploration/delineation wells to date – 12 have been successfully tested oil
- Huge 3P/P4 reserve/resource base of 641 million bbls indicates significant 2P reserve additions still to come
- Reserve reduction from Farmout can be added back with future exploration





## Summary

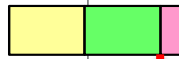
- Now a producing company with all necessary infrastructure in place at L-61
- Future projects incremental with robust economics
- Only producing from less than 20% of our current reserve base. Fields still to bring to production:
  - **Tungolskoye**                      **20 mm bbls of 2P reserves**
  - **Sibkrayevskoye**                **53 mm bbls of 2P reserves**
  - **Emtorskaya?**                    **Potentially 20-40 mmbbls**
- Focus on near term production growth and cash flow
- Strong Reserve Growth; Very significant reserve additions from exploration to date – particularly Sibkrayevskoye, more prospects still to explore
- Experienced and motivated management with strong local relationships
- **Farmout gives PetroNeft a new start with a great new partner – solves current debt and provides long term funding**



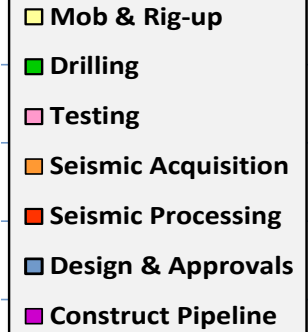
## Tungolskoye No. 5

Apr-14 Jul-14 Oct-14 Jan-15 Apr-15 Jul-15 Oct-15 Jan-16 Apr-16 Jul-16 Sep-16 Dec-16

Drilling + Testing T-5 well



Vertical well followed by 300m horizontal segment



## Arbuzovskoye Pad 1

5 wells at Arbuzovskoye



Up to 5 wells depending upon results

## Tungolskoye Pad 1

Pilot Project Approvals



Tungolskoye Pipeline



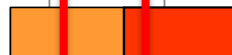
26 kms to Lineynoye Central Processing Facility

Drilling 5 Hz + 6 Vert wells



## Sibkrayevskoye

Sibkrayevskoye Seismic



Includes Emtorskaya and West Lineynoye

Drilling + Testing S-373 well



Timing and Location to be agreed with OIL

Pilot Project Approvals



Sibkrayevskoye Pipeline



Development Drilling



All wells in programme can be drilled with one drilling crew